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THE
JOURNAL
OF THE
KEW GUILD

FOUNDED—1892

AN ASSOCIATION OF
MEMBERS OF THE KEW STAFF
PAST AND PRESENT

1965

Trustees: Sir GEORGE TAYLOR, D.Sc., F.R.S.E., F.L.S., V.M.H., and
Dr. C. E. HUBBARD, O.B.E., D.Sc., F.L.S.

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PERCIVAL WILLIAM HENRY CONN

President, 1965/66.

Percy W. H. Conn was born in Shanklin, Isle of Wight, in May, 1900. Two and a half years later, his father, who was head gardener to Col. Stephenson R. Clarke, C.B.E., J.P., was transferred to the home estate at Borde Hill, Cuckfield, Sussex, and on leaving school Conn commenced his apprenticeship in these gardens.

Towards the end of 1917 he enlisted with the Scots Guards and on demobilisation in February, 1919, he applied for a studentship at Kew. Within a week he was installed in the Temperate Range but after a fortnight was transferred to the Propagating Pits. In twelve months promotion to Sub-foreman of the Orchid and Temperate Range followed. On leaving Kew in October, 1923, he was appointed to the position of Indoor Foreman at the University Botanic Garden, Cambridge. Our President held his first public parks appointment at the early age of twenty-six when he became Superintendent and Registrar of the Parks and Cemetery Department with the Tredegar Urban District Council. In 1930 he was appointed to a similar position with the County Borough of Gateshead, Co. Durham and whilst in this post he made several improvements at Saltwell Park. The Dene was cleared out and replanted, a new rock and water garden constructed and playing fields laid out in the Leam Valley.

An appointment as Superintendent of the Parks and Cemeteries Department of the City of Coventry was taken up in 1933. During the war years Conn was responsible for the enormous task of identifying and interring the victims of the heavy bombing to which the city was subjected. He also served on the War Agricultural Committee responsible for food production. During his stay at Coventry Conn constructed most of the airport and was responsible for its maintenance. He assisted in the drawing up of plans for the rebuilding of the city. This included the planning and construction of one of the first lawn cemeteries, a scheme which was at first criticised, but which is today adopted for all new cemeteries.

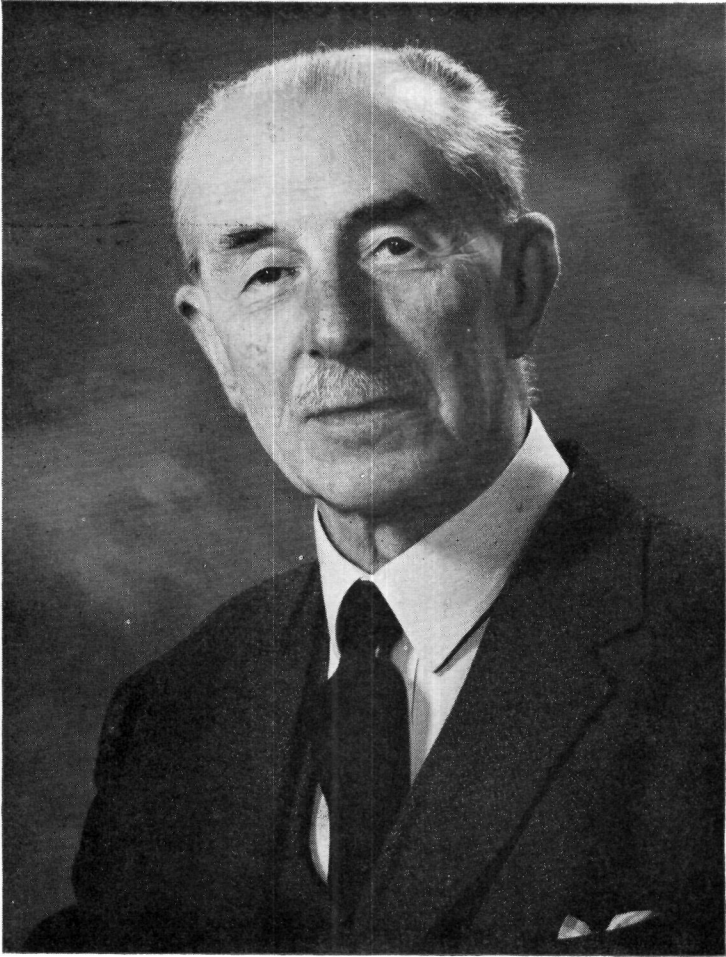
On the 1st January, 1947, the President took up his appointment of Director of Parks and Gardens to the City of Liverpool, with 123 open spaces in his charge, with a total acreage of 2,292 and a maintenance cost of just over one million pounds. Under his control were six cemeteries, a crematorium and responsibility for horticultural advisory work of the city and its gardens and allotments. This included work on the Corporation Committee responsible for the layout of school playing fields, landscape treatment of housing estates and all horticultural work on highways.

When Conn took charge at Liverpool the majority of the parks had suffered badly during the war years and it was his task to reinstate these areas in addition to the laying out of new parks.

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PERCIVAL WILLIAM HENRY CONN,
President, 1965/66.



ALFRED BERTRAM MELLES,

Vice-President, 1965/67.

ALFRED BERTRAM MELLES

Vice-President, 1965/67.

Melles was born at Stowmarket in Suffolk on January 17th, 1891, being the youngest of five sons. The family subsequently moved to London and Bert, who wished to be a gardener, was accepted in 1906 for the three year training course at the Royal Botanic Society's gardens in Regents Park. A period at Lealholm Lodge Gardens near Whitby followed. The rock and alpine garden on the banks of the river Esk were a notable feature there.

In April, 1910, Melles went to Cambridge Botanic Garden and remained there for four years. During this period he became Foreman's principal assistant, and had charge of the experimental house where Mendelian plant breeding studies were in progress. Notes which he kept during the year 1912 of all the plants which flowered in the plant houses prove that 112 Families were represented.

His studentship at Kew started in May, 1914, and he worked chiefly in the Decorative and Tropical Departments. It is interesting to learn that he read a paper to the Mutual Improvement Society on "The Cross-Pollination of Fruit Trees", a subject which was receiving keen interest at this time. Melles was one of the first to obtain the National Diploma of Horticulture.

His service in the Forces started in November, 1915, with the Royal Artillery and he was actively engaged in the Ypres Salient and on the Somme. A commission followed in October, 1917.

After the war Melles was one of four Kewites who were appointed Horticultural Officers with the newly formed Imperial War Graves Commission. He worked for many years in the Belgian area with a large staff of ex-servicemen, on laying out and planting the War Cemeteries. During this period he served as President of the British Club at Ypres, receiving the M.B.E. in 1925.

When the Second World War commenced he was stationed at Arras and in face of the German advance Melles, with a party of the Commission was instructed to return to England. Service as Commander of a coastal Defence Battery followed. Two years later he became Adjutant at a P.O.W. Camp.

In 1944 a return was made to the War Graves Commission as S.W. District Inspector with the rank of Major. One of our Vice-President's duties before reaching retiring age in January, 1956, was the supervision of landscaping and planting of the Air Force Memorial at Runnymede.

After retirement Melles undertook part-time work as Consultant with the Roads Beautifying Association, and he continued in this capacity until March, 1965, when the group terminated its pioneering work.

Mr. and Mrs. Melles hope to celebrate their Golden Wedding Anniversary in April, 1966—we send them our very best wishes.

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The majority of the collections had been lost but now after these had been restored Liverpool has the finest municipal collection of orchids in the country. The glasshouse section which Conn planned and built up has an international reputation.

Our President retired at the end of May, 1965, but he has seen the fulfilment of one of his dearest ambitions—the opening of the new Botanic Garden by Sir George Taylor, Director of Kew, in September, 1964 (see page 588).

Conn has judged at many of the noted shows in this country and on three occasions at the Ghent Floralties—in 1955, 1960 and 1965. On the three occasions when he has staged exhibits at Chelsea the Royal Horticultural Society has awarded Gold Medals. He was President of the International Federation of Park Administration from 1957 until 1965, a past President of the Institute of Park Administration (Inc.), a Fellow member of the Institute of Burial and Cremation Administration, a Licentiate member of the Institute of Landscape Architects, a Fellow member of the Royal Society of Arts and a member of the Council of the Northern Horticultural Society. He is also President of the Manchester and North of England Orchid Society and of the Liverpool and District Chrysanthemum and Dahlia Society. In 1956/57 the Liverpool Branch of N.A.L.G.O. was able to claim his services as president.

P. W. H. Conn was awarded the Associateship of Honour of the Royal Horticultural Society in 1958 while on the 10th July, 1965, the Hon. Degree of Master of Science was conferred by the Liverpool University.

PREVIOUS POSITIONS OF STUDENTS ON THREE-YEAR COURSE

(The course commenced 5th October, 1965, but a number entered Kew between April and September, 1965, as Student Improvers marked *.)

*A. H. Balfour	Waterers, Sons & Crisp.
R. C. Cowley	Coventry Parks Department.
*M. R. Cudd	G.L.C. Parks Department.
S. W. Dyall	Wolverhampton Parks Department.
M. E. Fay	Liverpool Parks Department.
*R. S. Hebb	Waterers, Sons & Crisp.
*H. G. Heywood	University of North Wales.
C. Hindmarch	Sunderland Hospitals Management.
C. W. Jones	Cardiff Parks.
Miss M. M. Jones	Taudevins Nursery.
*D. H. Miller	Brighton Parks Department.
Miss J. Nau	Hertfordshire Institute of Agriculture.
*G. A. Pattison	Rebel & Co., Holland.
R. A. Pitt	Portsmouth Parks Department.
J. D. Roberts	Tresco Abbey Gardens.
S. C. Scarr	Brighton Parks Department.
*I. M. Shepherd	Nottingham Parks Department.
G. F. Smith	M.P.B.W. Regents Parks.
Miss E. Stevens	Studley College.
D. Walshaw	Coventry Parks Department.
*A. D. Webster	Derby Parks Department.
A. M. Weir	Glasgow Parks Department.
F. C. Yong	Hilliers Nurseries, Winchester.

THE ANNUAL GENERAL MEETING, 1965.

The Annual General Meeting was held in the new Lecture Theatre in the Royal Botanic Gardens, Kew, on Saturday, 28th August, 1965. The President, Mr. S. A. Pearce, was in the Chair, with the Hon. Editor, Hon. Treasurer, Hon. Secretary, and fifty other members present.

The President opened the meeting by saying how pleased he was to have the privilege of welcoming members for the first time to the splendid and comfortable hall in which they were meeting—there could be no greater contrast with the old Iron Room in which so many meetings of the Guild had taken place. He hoped that everyone would take advantage of the invitation to see the rest of the accommodation provided for the students, and also the remainder of the building which was the new Jodrell Laboratory.

After apologies for absence, the President asked the meeting to stand while the names of Kewites who had died since the last A.G.M. were read.

The Minutes of the last A.G.M., printed in the *Journal* Vol. VIII, No. LXIX, pp. 390-396 (1965), were approved as were the Financial Accounts for 1964 which are also printed in the *Journal* No. LXIX, pp. 483-485.

Annual Report. The report of the Committee for the past year was presented by the Secretary under the headings printed in the Agenda as follows :—

- (i) *The Guild as a Charity.* The Guild was registered as a Charity on 30th October, 1964. Shortly afterwards the Officers met the Trustees to discuss the Guild's investments. Sir George Taylor drew attention to the Charities Official Investment Fund, established by the Charity Commissioners, which provides a sound return at very modest cost for investment by charities, and said that the Bentham-Moxon Trust had transferred its funds to that body on the advice of its financial experts. The Committee agreed that the Guild could not do better than follow this example, and our investments were sold and the proceeds sent to the Official Custodian for Charities for investment in the Charities Official Investment Fund. The Committee also decided that all the Guild's Post Office Savings Bank accounts should be closed, and that a deposit account should be opened in Barclays Bank, since the interest is 4% against 2½% in the Post Office.

The Committee also considered what steps should be taken to implement the aims and objects of the Guild in its enhanced status as a Charity. It was decided :—

- (a) To pursue the present policy of recording in the *Journal* as much news as possible about past and present Kewites.

- (b) To ensure so far as possible that activities and developments at Kew should be reported year by year in the *Journal*, and to continue to record items of historical interest.
 - (c) To continue to publish in the *Journal* articles and notes of horticultural and botanical interest.
 - (d) To increase the encouragement given to the student members of the Guild by providing more prizes, having in mind that the new 3-year course is now fully under way.
- (ii) *Account for the Half-year 1st January to 30th June, 1965. Income* £234 10s. 0d.—main items : Subscriptions £213 10s. 0d. (140 Bankers Orders @ 15s. and 8 @ 7s. 6d. = £108 ; annual subscriptions and arrears £100 ; additional life subscriptions £5 10s. 0d.), fees from advertisers £10, sale of *Journals* £3, donations £7 8s. 0d. *Expenditure* £516 — main items : cost of *Journals* £453 13s. 0d. ; postage of *Journals* £20 11s. 0d., printing £8 16s. 0d., Prizes £16 16s. 0d. *Expenditure exceeds Income* by £281 10s. 0d. *Amount in Bank* : deposit a/c £259, current a/c £90. *Invested* in Charities Official Investment Fund £2,500.

It is too early yet to see how the Guild's finances will work out under the new system of investment, but it is expected that income will cover expenditure and leave a small surplus.

- (iii) *Covenanting of Subscriptions.* Members paying income tax at the standard rate can increase the value of their annual subscription substantially by entering into a Deed of Covenant with the Guild. The Deed is for a minimum period of seven years, and all the member has to do is to sign the Deed and then each year sign a declaration that income tax has been paid and return it to the Hon. Treasurer. This will add to that Officer's work, but it is thought that this will be offset to some extent by the simplification of the accounts now that all the money is invested or in bank accounts. It is thought that any extra work will be worthwhile and the Committee recommends the meeting to support covenanting.
- (iv) *Investments.* At the request of the Official Custodian for Charities the Hon. Treasurer sold all the Guild's stocks, which realised £1,960 17s. 6d. against a face value of £2,076, the loss being on the 3% and 3½% stocks which yielded £854 15s. 4d. against a nominal value of £971. The amount from the P.O. Savings Banks accounts was £1,032 4s. 0d. £2,500 was sent to the Official Custodian for Charities: on this there was a surcharge of 1.67% leaving £2,458 4s. 9d. which, with the value of the share at 18s. 9d., entitles the Guild to 2,622 shares. The dividend

is paid quarterly; the amount may vary slightly from quarter to quarter but over the year it works out about 5%. For the July quarter this year we received £36 1s. 1d. (3.3d. per share). £500 was placed in a deposit account in Barclays Bank, the remainder of the Guild's funds being in a current account in the same bank.

For Guild purposes the dividend from the Charities Official Investment Fund and the interest from the deposit account will be divided among four Funds in the proportion to the amounts contributed by the Funds. The four Funds are:—

- (a) Publications Fund (Jubilee and General A/c—£2,475) 82% : the income goes towards the cost of our *Journal* and covers our liability to life-members.
- (b) Prize Fund (Matilda Smith, Dümmer, Proudlock—£245) 7½%.
- (c) Watson Educational Fund (£231) 7½%.
- (d) Benevolent Fund (£88) 3%.

For the time being payments from the Funds are made from the money in the bank. It is obvious that the Prize and Benevolent Funds must be built up, especially the former in view of the proposal to increase the number and value of the prizes. The prizes given this year cost £16 16s. 0d. With the extra prizes envisaged for the next year the cost will be £28 7s. 0d., and to provide all the prizes suggested would mean an annual expenditure of £38 17s. 0d. This can be met only by an investment of the order of £1,000, and the Committee recommends that a circular be sent to all members inviting subscriptions to raise this amount. It is a worthy cause.

In reply to questions, the Treasurer gave the following information about the Charities Fund. Only Official Charities can invest in the Fund. It was started in January, 1963, and the amount in January, 1965, was £17¼ millions. It is administered by a body of honorary and independent Trustees who are assisted by an Advisory Panel of people eminent in the investment field, the day-to-day management of the Fund being entrusted to an experienced Investment Manager. The Advisory Panel and the Investment Manager are appointed and remunerated by the Trustees. The large amount of money in the Fund is spread over a wide range of investments at home and abroad, and changes are made when necessary to ensure that the money earns the maximum amount of interest. The assets are valued quarterly, in January, April, July and October, and a dividend is declared from the income earned, the amount being remitted on the last day of the valuation month. The shares have no nominal

value, the income from the amount invested is divided by the number of shares held by the participating charities and the dividend is declared per share—in July it was 3.3d. per share.

In the course of the discussion on prizes, it was explained that the Committee proposed that the extra prizes should be established only when they could be provided from the Prize Fund—hence the suggestion that a circular inviting donations be sent out. It was generally agreed that the provision of more prizes was a most appropriate object for the Guild and a proposal by Mr. Cherry, seconded by Mr. Prockter, that an appeal for funds should be made was carried unanimously.

- (v) *Membership.* Life-members 294; subscription-paying members Old Kewites 311; Present Staff 60; Student Gardeners 38.
- (vi) *Journal.* The 1964 *Journal* was distributed on 17th May; it had been hoped to issue it by the end of April but various delays outside the Editor's control held it back. It is 20 pages larger than last year and there are two full-page group photographs and, as an innovation, a larger one of the dinner. It was found that to re-arrange the Address List on a geographical basis, as agreed at last year's A.G.M. would have been prohibitively costly, since the type is kept standing from year to year and would have to be broken up and completely re-set. And, of course, the same cost would be incurred the following year when the list was restored to the alphabetical sequence. The Committee therefore decided that only the names of members should be arranged geographically, and that the Address List should be retained in its usual form. Nevertheless the *Journal* cost £453 18s. 1d. an increase of £109 18s. 0d. over last year. It is hoped to reduce this next year by pruning contributions as much as possible, and by simplifying the layout where practicable. As already mentioned, the *Journal* is to record as much news as possible about Kewites past and present, information about Kew itself—present-day development and historical records — and informative horticultural and botanical articles. Despite the great effort put into it, the number of Advertisers could not be increased.

In the discussion that followed it was generally agreed that the standard of the *Journal* must be maintained and that the Guild must be prepared to meet increased costs rather than have the *Journal* reduced to keep costs down. It was emphasised that the *Journal* is the most important link between members and that efforts should be made to increase its contents rather than otherwise. The value of the group photographs was questioned but on the whole their inclusion was regarded as justified.

- (vii) *Back Numbers of the Journal*. Five copies were sold during the year, bringing in £3 3s.
- (viii) *Collection of Photographs*. 16 photographs were added during the year, bringing the total to 379. We are again indebted to Mr. S. W. Rawlings for looking after the collection of Photographs and the stock of the *Journal*, and for despatching copies as required.
- (ix) *Annual Dinner*. This was again held in the Chatham Room Restaurant and was attended by 120 members and guests. Restaurant charges had been increased since last year, and it was necessary to charge 30s. each to cover costs. In the event there was a small deficit of £2 19s. 6½d. due, in part, to increased printing costs.
- (x) *Ties, Badges, etc.* 65 ties were purchased during the year and 38 have been sold, leaving 27 in stock. It was decided that the Guild should hold a stock of 6 badges, 3 on black and 3 on blue, and to replace as sold. In this way the delay in obtaining a badge is avoided. 10 have been sold during the year, 5 are in stock. The Students' Union suggested that a Guild scarf should be provided, and this was agreed. A sub-committee prepared an acceptable design and eighteen scarves have been purchased. Those 5 feet long cost 28s. 6d. and sell for 30s. those 6 feet long 33s. 6d. and sell for 35s.; so far 14 have been sold and we have 4 in stock. Car badges can be supplied at 35s. each; two have been sold, and we have two in stock. Cuff-links are available at 52s. 6d. a pair; two pairs have been sold and there is one pair in stock. The value of the stock of these various items is: ties £21 18s. 0d., badges £13 2s. 6d., scarves £6 6s. 0d., car-badges £3 10s. 0d., cuff-links £2 12s. 6d., a total of £47 9s. 0d.

Further enquiries were made about lapel-badge/brooch and an excellent design has been submitted. Unfortunately, the cost is much greater than was first estimated owing to the work required to get a good reproduction. The die (etc.) will cost £50 plus 25% purchase tax, i.e. £62 10s. 0d., in addition we would have to pay 6s. plus 25% tax (i.e. 7s. 6d.) for each badge if we take 72, and 4s. plus 25% (i.e. 5s.) each if we take 144. If we took 144, we would need to charge 15s. each to cover our costs (£98 10s. 0d.) and postage—and we would have to sell 144 fairly quickly in order that money should not be locked away in stock.

- (xi) *Christmas Cards*. The whole stock of the 1964 cards were sold, as were all the old cards. This year three cards will be produced, one with a reproduction of an old print of the Gardens, a second with the Guild Arms, and the third a photograph of the Queen's Cottage under snow. The

first and third will be available in two forms as usual : the second will be for Guild members only.

- (xii) *Memorial to John Smith.* In order to obtain a faculty to erect the proposed memorial in St. Anne's Church, it was necessary to have the approval of the Church Council. When the matter was before the Council it was discovered that some years ago a decision was taken that no further memorials would be allowed in the Church. This decision could not be altered, and it is thus impossible to obtain a faculty. The idea of a memorial has, therefore, had to be abandoned.
- (xiii) *Prizes.* The last of the two-year courses at Kew ended in 1965 and the usual prizes were provided, the Guild taking over the C. P. Raffill Prize, hitherto presented by the Curator, after the death of Mr. Stenning.

The first of the new three-year courses ends in 1966, and the C. J. Johnson Memorial Prize provided by *The Grower Publications* will be awarded for the first time. It goes to the student who has the highest aggregate of marks over the course, and thus replaces the Guild's Matilda Smith Prize. At the same time *The Grower Prize* for the best practical gardener will be discontinued. The Committee has considered what should be done, and what further prizes the Guild can provide to encourage its younger student members. It is suggested that the Matilda Smith Prize should be increased in value to £10 10s. 0d. and be awarded to the Student adjudged the best practical gardener, thus replacing *The Grower Prize*. It is also suggested that the Guild should provide prizes for the special individual work which students must do each year, namely cultivation of a vegetable plot (first year) collection of British plants (second year) and a special project (third year). The second year is already covered by the Dümmer and Proudlock Prizes, and it is suggested that a prize value £3 3s. 0d. be provided for both the first and third years. As already noted (p. 529), this will cost the Guild £28 7s. 0d. a year and to provide this it is necessary to increase our Prize Fund from the present £245 to £700. The Committee also recommends that, as soon as financially practicable, the Guild should provide further prizes, namely for the students who attain the highest marks during the first and second years, and for the student who shows the greatest improvement. To do this the Prize Fund will have to be built up to £1,000.

Students who pass the course will be awarded the new Kew Diploma, and these together with the prizes will be presented at a prize-giving at Kew as soon after the end of the course as possible. The Director extends a warm invitation to members of the Guild to attend the function. It could become a valuable meeting day for

the Guild, and enable older Kewites to meet the younger members as well as one another. In answer to questions it was stated that prizes would no longer be presented at the Annual Dinner. The question whether or not the names of prize winners should be announced at the dinner was left to the Committee. Speakers agreed that the provision of the full range of prizes suggested by the Committee would be very well worth while.

- (xiv) *Trustees.* The death of Mr. Stenning left the Guild with only one Trustee. By our Rules the Guild must have at least two and not more than four. The Committee thinks it prudent to have at least three Trustees. Dr. Hubbard was asked to accept office and kindly agreed to do so. The new Curator of the Gardens will be invited to become the third Trustee, when he is appointed.
- (xv) The following leave the Committee on completion of their term of office: Mr. J. S. L. Gilmour (Past President), Mr. E. Brown (Vice-President), Mr. J. R. Hibbert, Dr. Keith Jones and Mr. R. C. McMillan (members)*, while the retiring auditor is Mr. J. Souster. The thanks of the Guild go to all these Kewites for the work they have done.
- (xvi) Finally the Committee wishes to draw attention to the fact that although nominations for officers and members of the Committee can be made by any member of the Guild, nobody ever does so. As a result, nominations are made by the Committee itself, which is thus a self-perpetuating body. The Committee urges members to take an active interest in this matter and to either make nominations or send suggestions for consideration by the Committee. It would be a healthy sign if we had competition for the various posts, and elections at the A.G.M.

After the last item, the adoption of the report was moved by Mr. Jones, seconded by Mr. Leith, and carried unanimously.

* The fourth member, Mr. M. Free, died in 1965—see page 598.

Election of Officers, Members of the Committee and Auditor.

The following, whose names appeared on the Agenda as nominated in accordance with the Rules, were elected unanimously with acclamation: President: Mr. P. W. H. Conn. Mr. Conn said he greatly appreciated the honour of becoming President of the Guild and he was even more pleased as it was some time since a Parks Superintendent had occupied that position. He thanked members for the trust placed in him and would do his best to justify that trust. President-Elect: Mr. T. H. Everett; Vice-President: Mr. A. B. Melles; Hon. Editor: Mr. G. E. Brown; Hon. Treasurer: Mr. J. B. Simmons; Hon. Secretary: Mr. J. R. Sealy; Members of the Committee: Mr. A. R. T. Buckley, Mr. G. S. Joy, Dr. C. R. Metcalfe, Mr. W. E. Storey; Hon. Auditor: Mr. R. I. Beyer.

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GENERAL INCOME AND EXPENDITURE ACCOUNT

Year 1964			Year 1965								
£	s.	d.	£	s.	d.						
	11	6	7	To Hon. Secretary's Expenses	3	9	5		
	7	19	11	To Hon. Editor's Expenses	...	...	12	9	9
	15	6	0½	To Hon. Treasurer's Expenses	...	...	3	12	1
	13	8	4	General Printing and Stationery	...	...	32	11	9
	4	10	0	Typing Expenses	...	...	8	0	0
	4	1	0	Engrave Proudlock Cup(s) and Insurance	...	...	0	15	0
	—	—	—	Official Copy 1965 Dinner Photo	...	...	0	8	6
	10	18	0	Wreath(s) for Old Kewite(s)	...	...	3	3	0
<i>To Kew Guild Journal—</i>											
343	15	0		Printing 1964 Journal (Including Blocks)	453	18	1				
5	7	0		Envelopes for 1964 Journal	5	10	6				
15	4	7		Postage on 1964 Journal	20	18	0½				
364	6	7			480	6	7½				
84	14	4		<i>Less Receipts from Advertisers and extra Journal Sales</i>	105	2	8				
279	12	3			375	3	11½				
<i>To Annual General Meeting—</i>											
	4	6	10	Printing, Postage and Envelopes	...	...	10	12	0
<i>Kew Guild Dinner—</i>											
160	19	3		Cost of Dinners, Gratuities, Printing Fees, etc.	172	9	6½				
161	5	0		<i>Less Receipts</i>	169	10	0				
				(1964 a profit 5/9 shown on income)				2	19	6½	
92	12	0		Solicitors' Fees (Charity Application)	...	...	—	—	—
20	0	0		Payment to Subsidise Proudlock Fund	...	...	—	—	—
10	0	0		Payment to Subsidise Matilda Smith Fund	...	...	—	—	—
9	0	10		Payment to Students' Union	...	...	—	—	—
10	10	0		Payment from Benevolent Fund	...	...	—	—	—
<i>Prizes Awarded by Guild, 1965—</i>											
3	3	0		Proudlock Memorial Prize: to A. Overland	3	3	0				
				C. P. Raffill Memorial Prize: to H. Fliegner	3	3	0				
5	5	0		Matilda Smith Memorial Prize: to M. Dodge	5	5	0				
5	5	0		Dümmer Memorial Prize: to J. Endall	5	5	0				
13	13	0			16	16	0				
0	15	4		Bank Expenses	...	...	2	2	2
508	0	1½			472	3	2				
2	866	11	1½	Balance as per Balance Sheet	...	...	2,816	1	2½
<hr/>						<hr/>					
£2,866	11	1½				£2,816	1	2½			

FOR THE YEAR ENDED 31st DECEMBER, 1965

Year 1964				Year 1965						
£	s.	d.		£	s.	d.	£	s.	d.	
	300	5	10	By Annual Subscriptions and Arrears	...	...	291	10	10
	11	18	0	By Donations	...	...	17	7	0
	0	3	6	By Sale of Colour Print	...	...	0	3	6
	9	0	10	By Profit from Christmas Card Sales	...	...	---	---	---
				By Dividends—						
	53	17	11	From Jubilee Fund (up to March, 1965)	...	...	2	19	6
	25	16	6	From Capital Account	...	...	---	---	---
	---	---	---	From Investment Fund (Quarter ended 5th July, 1965)	...	...	36	1	1
				Investment Fund (Quarter ended 5th October, 1965)	...	...	29	9	11
	79	14	5				68	10	6	
				By Interest—						
				From Deposit Account at Bank	...	...	14	17	1
	24	2	6	From Deposit in P.O.S.B. Accounts (to March, 1965)	...	...	18	3	4
				By Guild Emblem Sales—						
	5	5	7	Receipts less Expenditure (Including Post, etc.)	...	...	1	9	0
				By Guild Annual Tea—						
	13	12	0	Receipts	...	...	18	18	0
	13	12	0	Less Expenditure	...	...	16	16	0
							2	2	0	
	0	5	9	By Profit, 1964, Kew Guild Dinner	...	...	---	---	---
				By Balance from Grant of Arms and Badge Fund						
	45	1	3	Fund	...	...	---	---	---
	475	17	8				414	3	3	
	32	2	5½	Expenditure Exceeds Income	...	...	57	19	11
	508	0	1½				472	3	2	
2 898	13	7		Balance at 1st January, 1965	...	...	2,866	11	1½
				Reduction of Life Subscriptions Liabilities by Death of Members	...	...	7	10	0
							2,874	1	1½	
	32	2	5½	Less Excess of Expenditure over Income	...	...	57	19	11
	2,866	11	1½				2,816	1	2½	
	£2,866	11	1½				£2,816	1	2½	

THE KEW GUILD BALANCE SHEET

Year 1964		LIABILITIES	Year 1965	
£	s. d.		£	s. d.
CAPITAL FUND—				
2 866	11 1½	As per attached Statement of Assets ...	2,816	1 2½
CURRENT LIABILITIES—				
Life Subscribers—				
50	0 0	95 at £1, half rate	47	10 0
101	0 0	96 at £2, half rate	96	0 0
129	3 0	82 at £3 3s. 0d., half rate	129	3 0
42	0 0	8 at £5 5s 0d.	42	0 0
<hr style="width: 100%;"/>	322 3 0		<hr style="width: 100%;"/>	314 13 0

£3,188 14 1½

£3,130 14 2½

FOR THE YEAR ENDED 31st DECEMBER, 1965

Year 1964		ASSETS	Year 1965	
£	s. d.		£	s. d.
INVESTED ASSETS—				
<i>Post Office Accounts—</i>				
300 0 0		P.O. A/c—General Fund	—	—
21 1 6		„ War Memorial Fund	—	—
88 8 10		„ Benevolent Fund	—	—
56 19 9		„ Dümmer Memorial Fund	—	—
35 2 9		„ Matilda Smith Memorial Fund	—	—
174 3 9		„ Educational Fund	—	—
21 15 8		„ Proudlock Prize Fund	—	—
<hr/>	697 12 3		<hr/>	
<i>Stock—Realised Market Value—</i>				
25 15 0		3% Savings Bonds, 1965-75—Jubilee ...	—	—
218 9 3		3% Savings Bonds, 1965-70—Jubilee ...	—	—
541 4 0		3% Savings Bonds, 1955-65—Matilda Smith	—	—
		3% Savings Bonds, 1955-65—Sir A.	—	—
		Hill Capital Account	—	—
69 7 1		3½% War Stock, 1929-47—W. Watson	—	—
		3½% War Stock, 1929-47—Capital Account	—	—
86 19 11		4% Funding Stock, 1960-90—Dümmer	—	—
<hr/>	941 15 3	4% Funding Stock—1960-90—Proudlock	—	—
		<hr/>	<hr/>	
<i>Defence Bonds—Realised Market Value—</i>				
210 2 11		3½% Defence Bonds—Jubilee	—	—
9 14 7		4% Defence Bonds—Jubilee	—	—
		4½% Defence Bonds—Capital Account,	—	—
		W. H. Judd	—	—
222 19 6		4½% Defence Bonds—Jubilee	—	—
400 6 10		4½% Defence Bonds—Jubilee	—	—
10 2 10		4½% Defence Bonds—Jubilee	—	—
107 12 2		5% Defence Bonds—Jubilee	—	—
54 5 5		5% Defence Bonds—Jubilee	—	—
<hr/>	1,015 4 3		<hr/>	
		<i>Charities Official Investment Fund (at Cost)</i>	2,500 0 0	
CURRENT ASSETS—				
—	—	Stock of Xmas Cards (Purchase Value)	55 8 2	
7 0 0		Stock of Guild Emblems	28 10 6	
316 7 11		Cash on Deposit	314 17 1	
78 16 4		Cash in Current Account at Bank ...	107 11 10	
14 10 7½		Cash in Hand	15 18 0½	
117 7 6		Nominal Valuation of Journals in Stock	108 8 7	
<hr/>	£3,188 14 1½		<hr/>	£3,130 14 2½
			<hr/>	

Audited and found correct,

H. J. LANGHAM and I. BEYER, *Hon. Auditors.*

(continued from page 533)

Date of the Annual General Meeting.

The Secretary said that as August Bank Holiday is now the last Monday in the month instead of the first, the A.G.M. will be at the Bank Holiday weekend in five years out of seven, and it had been suggested that the date of the A.G.M. might be changed to avoid this. The Committee would like the opinion of members. Those who spoke thought that the Bank Holiday would make little or no difference to the attendance at the A.G.M., and the meeting finally agreed that the date should not be altered.

Vote of Thanks.

Mr. Stock said he was sure he was expressing the feeling of all present by saying that the meeting should not be allowed to end without thanking the President for the able way he had conducted the meeting and for all the hard work he had done on behalf of the Guild during his year of office; he therefore proposed a hearty vote of thanks to the President, and this was carried with great acclamation.

The meeting ended at 4.15 p.m. and members then adjourned to see the Jodrell Laboratory and afterwards to tea in the Orangery.

J. ROBERT SEALY, *Hon. Secretary.*

ANNUAL DINNER, 1965.

The Annual Dinner was held at the Chatham Restaurant, Victoria Station, on Wednesday, 26th May, 1965. With the President for 1964/65, Sidney A. Pearce, his wife, members and guests, in all 123 attended. The food was excellent, the menu was as follows—Fresh Grapefruit; Goujennete of Sole, Tartare Sauce; Roast Turkey, Stuffing, Chateau Potatoes, Brussels Sprouts; Soufflé Surprise; and Coffee. The Toast Master was E. W. Macdonald.

Following the meal the assembled company settled down to the speeches which delighted all—they were short and to the point, snappy and full of humour.

After raising glasses to The Queen, the toast to the President was proposed by Noël J. Prockter. It was a duty which he enjoyed and his enthusiasm was shared by all. Prockter spoke of the President's great work at Kew, both as Assistant Curator of Arboretum and as Acting Curator. In addition he mentioned his work for the Guild as Hon. Assistant Secretary and the Editor of the *Journal* 1945-52, and the important role which he plays in the work of the Royal Horticultural Society and of his reputation as an author.

S. A. Pearce replied by first thanking the members for the great honour they had bestowed upon him in electing him as President. Stating that he had entered Kew as a Student Gardener 37 years ago, he followed by outlining the main purpose of the

dinner — to meet old friends and colleagues — and also for the present-day students to have the opportunity to meet Old Kewites persons whom they may know by name and no more. This he stated, “ has always been considered an advantage and an opportunity not to be missed, particularly where contacts of advantage are concerned ”. He remarked on the small representation of present-day Students attending, which he remarked, “ is not good for the future of the Guild ”. After expressing the sincere hope that there is a better attendance of Students in the years to come, our President turned to Guild affairs. He spoke of the most important change in the status of the Guild, in that it had, legally, become a charity and was registered as such on 30th October, 1964. Having said that the Guild as a Charity should associate itself with and stimulate interest in the three-year training scheme, our President disclosed that the Committee was actively engaged with the question of additional prizes and that a proposition regarding the provision for these would be placed before the next A.G.M. (please refer to the A.G.M. report). He expressed his confidence that if an appeal was launched to provide capital for an adequate prize, it would receive generous support.

The President finally mentioned that the Annual General Meeting for 1965 would be held for the first time in the new Lecture Theatre, which is on the site of the Iron Room, where so many of the previous meetings had been held. He then asked members to rise and drink to the toast to the Kew Guild.

L. Pemberton, Supervisor of Studies, rose to propose the toast of the Guests. He spoke of J. C. Fraser, head of the Horticultural Department at the Surrey Farm Institute, Merrist Wood, and the long association and experience which he had in horticulture. He also mentioned the day-release classes at Merrist Wood, which the Kew improvers attend. Then Pemberton turned to Mr. and Mrs. R. J. Wallis from Wakehurst Place, which he described as a beautiful place. He remarked upon the superb exhibits which these gardens had put up at the R.H.S. tree and shrub competitions in past years. Finally to Percy Thrower, the television personality, whom the speaker described as, “ The Nation’s Head Gardener ”. Percy Thrower gave a very able reply on behalf of the guests during which he described gardening as the No. 1 hobby of Britain.

The Assembly rose, delighted and eager, to meet at the bar and tables once again, to meet old friends, and to make new ones. The great regard and interest which all, both young and old have had for the Gardens, left one in no doubt that the Guild adds greatly to the prestige of Kew.

KEW GUILD TIE

These are now available, manufactured in terylene, and are priced at 16 shillings, including postage (payable in advance)

Please send remittances to the Hon. Treasurer

All cheques, P.O.’s, etc., should be made payable to THE KEW GUILD

THE ASSOCIATION OF KEW GARDENERS IN AMERICA

The Association held its annual meeting at the New York Botanical Garden on Monday, October 25th, after a luncheon at the Bedford Park Restaurant.

The following Kewmen and wives were present : Mr. William Ing, Mr. and Mrs. Henry Downer, Mr. and Mrs. J. H. Beale, Mr. and Mrs. Michael Dodge and Mr. and Mrs. Samuel Bridge, Jr. Former students of the Royal Botanical Gardens in Edinburgh, also invited to attend, were Mr. John Dourley, Mr. Don Richardson and Mr. Stuart Longmuir. Other guests were Miss Elizabeth Hall, Associate Curator of Education at the New York Botanical Garden and Miss Hetty Everett of the Botanical Garden Staff.

We are happy to announce that Mr. Leslie Laking, Director of the Royal Botanical Gardens in Hamilton, Ontario, was elected a Director of the Association to fill the office left vacant by the death of Mr. Montague Free in January of this year.

A vote was carried to hold the annual meeting for 1966 in conjunction with the International Horticultural Congress at The University of Maryland in hopes that some of the overseas Kew men and men from this part of the world attending the Congress may join us.

Notes were read from the following who were unable to attend : Mrs. Colin Duncan, Mr. Frank Mackaness, Mr. Gordon Scott, Mr. Leslie Laking, Mr. Herbert Blanche, Mr. Stanley Candler, Mr. Howard Swift and Mr. James Semple. A letter from Mrs. F. C. W. Lazenby brought news of her father-in-law's death in April, 1960. Mr. Francis Lazenby was Director of the Harvard Botanic Gardens in Cambridge, Massachusetts until his retirement in 1948 when the Gardens were closed.

After the meeting Mr. Louis Politi, Horticulturist at the Botanical Garden, conducted the group around the grounds and propagating houses to see new plant introductions and familiar old timers, also some new or well-proven methods of plant propagation. Of particular interest was the new mist or fog system installed for growing plants in the new native plant garden which adjoins the rock garden.

Kewite Mr. Thomas Everett, Assistant Director and Senior Curator of Education, then showed some interesting slides he had taken in South America representing many as yet unidentified plants growing in their natural habitats and others familiar to us as they are grown and used in the gardens of South America.

SAMUEL F. BRIDGE, JR. (1939), *Secretary*.

BLAZER BADGES

These are now available, priced 53s. 6d., inc. postage (payable in advance),
from the Hon. Treasurer

KEWITES REUNION IN BERMUDA.

The Kewites resident in Bermuda were honoured to have a visit from Dr. and Mrs. C. R. Metcalfe from the 4th to 6th March, 1965. They were returning to Kew from their holiday in Jamaica and took the opportunity to stop over in Bermuda.

On the evening of the 5th March the Bermuda Kewites met at the residence of Mr. and Mrs. G. R. Groves to welcome Dr. and Mrs. Metcalfe. This was a very pleasant evening with Dr. Metcalfe showing the members of the party photographs of the new Jodrell Laboratory and the new lecture theatre. The former students regarded this as a wonderful improvement; but were a little envious of the facilities now provided. In addition to Mr. G. R. Groves (1937) who is Director of the Bermuda Department of Agriculture and Fisheries, the other Kewites present on this occasion were Mr. D. J. Moore (1956), Mr. J. H. Jones (1956), Mr. Andrew Pearce (1962) and Mr. David Ralston (1963), who were all accompanied by their wives. Mr. Roy Thomas (1957) was unable to attend. He was in the Bahamas at that time setting up a new branch of his Company, The Bermuda Horticultural Services Ltd.

While Dr. and Mrs. Metcalfe were in Bermuda they were able to see a good deal of the Islands and the horticultural work being undertaken by the Department of Agriculture and Fisheries. Unfortunately, it rained almost continuously on Friday the 5th March, but nevertheless, they were able to get a fair idea of the scenery and plant life.

We were all delighted to have this opportunity to meet Dr. Metcalfe and his wife and to discuss various factors of the Kew Life. We hope that we may be privileged to entertain other Kewites when they are visiting this part of the world, for they will always find a pleasant and warm welcome.

G. R. GROVES (1937).

NEW ZEALAND BRANCH OF THE KEW GUILD

A short Annual General Meeting was held on 17th February, 1965, in Hamilton. J. A. McPherson was elected President and he paid a most sincere tribute to his predecessor, the late M. J. Barnett (1914).

Present were: J. A. McPherson (1924), Auckland; D. H. Leigh (1933), Nelson; J. G. Mackenzie (1934), Hastings; L. Lannie (1939), Napier; I. D. Galloway (1952), Wellington; J. H. Edwards (1947), New Plymouth; D. C. Mackenzie (1939), Palmerston North; C. I. McDowall (1960), New Plymouth.

This year no Annual Dinner was held as in past years but next year, C. I. McDonnell and J. H. Edwards, both resident in New Plymouth, have assured us that a worthwhile function will take place.

D. C. MACKENZIE, *Hon. Secretary.*

A VISIT TO KEWITES "DOWN UNDER"

On my retirement in 1964 I was able to fulfil a dream which had long been nurtured—to visit New Zealand and Australia. The wish had been kept alive by constant correspondence with A. W. Anderson, of Timaru, New Zealand, who, when he arrived in Kew in 1924, shared digs in Gloucester Road with Harold Kemp, Frank Knight and myself.

The journey started on 16th October, 1964, from London on the "Corinthic", and after a comfortable but tedious voyage, via the Panama Canal, my arrival at Wellington was on November 16th. Upon disembarking, I recovered my land legs in an enforced chase of a cartwheeling Panama hat—Windy Wellington!

Crossing to the South Island by night-ferry, I arrived at Lyttleton Harbour at 7 a.m. and was met by Anderson, who had left home at 3 a.m. to greet me. Breakfast at Christchurch followed, before being whisked away to the newly established nursery of a Kewite, D. Riach (1955) who, between attending to customers, showed me many of his well-grown alpiners. The garden of the Timaru home of my host, who is of course a keen and knowledgeable plantsman, contained many interesting plants.

The highlights of my stay in South Island, were visits to Anderson's mountain home, near the beautiful Lake Tekapo in the desolate Mackenzie country, and to Mount Cook, where, in the upland valleys, I was able to wander amongst huge colonies of the Mountain Lily, *Ranunculus lyalli*.

From Tekapo, Anderson took me for a walk to the nearby Mount Edward, in quest of Vegetable Sheep, *Raoulia eximia* and other plants of the high shingle slopes. With a pair of borrowed boots, it seemed a tolerable hike, until our arrival at a fast running creek which, it was demonstrated, could be easily waded. I can still feel those rounded stones pounding my toes and ankles. From the creek the climb became rapidly steeper, and then at about 5,000 ft. recurrence of an old foot trouble put an end to my summit ambitions. In the undignified retreat, my hands, knees and hind-quarters were stabbed repeatedly by the vicious needle-sharp leaf points of Spaniard, *Aciphylla colensoi*.

With Timaru as G.H.Q. I ramified through both Islands, visiting Botanic Gardens, Parks Depts., Agricultural Colleges and their Horticultural Depts., Turf Research Centres and Nurseries, and travelling mainly by public transport, covered approximately 4,800 miles, by air, rail and road, during my nine weeks stay in New Zealand. At Dunedin Botanic Gardens I met Bob Balch (1939), who is very keen on Rhododendrons, and who has a regular spot on a Broadcast Gardening Programme. A surprise call was made on Dennis Leigh (1933), at Nelson, and here I received a warm welcome. He is doing a good job in a pleasant city, which despite its claim as having the greatest number of sunshine hours, is a bit off the beaten track of tourists. A visit from a Kewite seemed particularly acceptable.

In Auckland, Jim McPherson (1924) was my host. His introduction, so I'm told, of the weird Maori whoop so disturbed the traditional decorum of the Arboretum and its environs, that even the late C.P.R. was stumped for words!

In my travels I received abundant evidence of the high esteem in which J. McPherson and A. W. Anderson are held in horticultural circles throughout New Zealand. It was in Auckland too that I met G. Dean (1937) and P. Jew (1955).

At Palmerston North, Doug Mackenzie (1939) arranged a full and interesting itinerary for me. He also secured for me an air-lift to the S. Island, during Christmas week, and in a country where everything appears to close down for annual holidays at that season, and all transport is booked weeks ahead, this seemed a miracle.

I also met John Mackenzie (1934) at Hastings, the fruit bowl of New Zealand, and he gave me a full tour of the Parks as well as taking me to orchards and market gardens in the locality.

Although my journey took me to Lower Hutt, Wellington, New Plymouth, Napier and Christchurch, there was little time to visit other Kewites I would like to have seen, but I heard enough to appreciate that in New Zealand, Kewites are welcomed and their knowledge is respected.

During my fourteen weeks stay in Australia, I only encountered three Kewites in just 10,000 miles of travelling. At Glenorie, N.S.W., I surprised R. H. Rumsey (1932) in his potting shed, where he was busily preparing buds for insertion in stocks, in his well-known rose nursery. How well known?—well he told me that he had recently received a letter addressed to R. H. Rumsey, Rose Grower, N.S.W., and as everyone knows, New South Wales is a large state in a vast country. I met Mr. Lothian (1940) at Adelaide Botanic Gardens, and he caused me to dash off to the heat of the sun baked interior, as far as Broken Hill, to see what a wonderful oasis had been created in a desert, by the plantation officer to Broken Hill Mining Corporation. A unique horticultural achievement.

After meeting the Director of Kings Park Botanic Garden, Perth, Dr. Beard, who had spent a period at the Herbarium, Kew, I was introduced to E. Wittwes (1939), who is in charge of the nursery where there is an amazing stock of one of the world's richest floras—that of Western Australia. When in the company of the Botanist at Brisbane Botanic Gardens, I am sure I detected a fresh flood of sweat on his brow, as he recalled the colossal amount of collecting accomplished by Dr. C. E. Hubbard, in Queensland's sweltering heat in the thirties.

I will long remember with gratitude, numerous horticulturists, whose help, courtesy and hospitality made my tour "Down Under" such an enjoyable and fruitful experience.

W. HOWELL (1925).

NOTES AND GLEANINGS.
AWARDS AND SUCCESSES

The following awards have been made by Her Majesty the Queen in the New Year Honours List, 1966 :—

The I.S.O. to Dr. F. N. Howes—Keeper, Department of Economic Botany Principal Scientific Officer.

The M.B.E. to C. R. S. Gregory (1925).

In the Birthday Honours List, June, 1965 :—

The M.B.E. to C. E. Puddle (1964).

R.H.S. Honours and Awards :—

The V.M.H. to W. Nelmes (1928).

An A.H.R.H.S. to E. J. H. Coward (1932).

W. J. C. Lawrence (1924)—A Silver Medal and £50 for his contribution to horticulture in connection with the development of the John Innes series of composts.

In February Dr. John Hutchinson was awarded a Linnean Gold Medal for his distinguished services to Botany. Also in February he was elected to Honorary Fellowship of the Association for Tropical Biology.

In January V. S. Summerhayes (1964) was elected as an Honorary Member of the British Ecological Society, which he served as Treasurer for nearly 20 years.

On July 10th P. W. H. Conn (1923), President of Kew Guild, received an Honorary Degree from the University of Liverpool.

J. D. Snowden (1911). An award of Appreciation for Distinguished Service to American Agriculture through Grain Sorghum Research and Development.

D. F. Cutler, Scientific Officer, Jodrell Laboratory, awarded the degree of Doctor of Philosophy (University of London) for his thesis on "The taxonomic Significance of the Anatomy of the Restionaceae".

M. C. Powell (1957) was awarded the degree of Doctor of Philosophy (University of Reading) for her thesis on "Heterophylly in *Acacia melanoxylon*".

NATIONAL DIPLOMA IN HORTICULTURE, 1965 :—

Final—Public Parks Section :—

P. H. Bridgeman (1964).

J. F. Warrington (1962).

DIPLOMA OF THE INSTITUTE OF PARKS AND RECREATION ADMINISTRATION :—

Final :—

P. H. Bridgeman (1964).

A. Pedley (1959).

NATIONAL DIPLOMA IN HORTICULTURE (N.Z.) :—

Intermediate :—

A. D. MacArthur (1963).

G. E. Collins (1955) started as Head Gardener at Inverewe in August, 1964. This is the famous garden on the west coast of Scotland with a climate which is largely influenced by the Gulf Stream. It is now a Scottish National Trust property. In a recent letter Collins stated that a record number of 83,000 had visited the gardens in 1965.

M. E. Baren (1962) is progressing well at Burnley as Technical Assistant.

B. Dodds (1961) is with the Newcastle Education Department.

B. Hill (1961) is Deputy Superintendent at Watford Parks Department.

P. S. L. Benton (1947) is District Superintendent to the Greater London Borough of Richmond-upon-Thames.

K. Robinson (1965) who left the three-year course at the end of the second year is Technical Assistant at the above department.

B. E. Humphery (1961) is General Manager of Messrs. Hilliers Nurseries, Winchester.

A. M. Melles (1960) is Landscape Supervisor to the Basildon Development Corporation.

D. G. Pearce (1960) is Technical Assistant to the Parks, Cemeteries and Allotments Department. Previously he was T.A. and senior T.A. with the County of Middlesbrough Parks Department. He began his career at Southport Parks Department and after Kew attended Course No. 22 at the Grotto.

P. F. McCormack (1936) was appointed Director of Parks, Liverpool, on 2nd December, 1964, to succeed P. W. H. Conn (Guild President) who retired in May, 1965. McCormack served in the Harrogate and Southend Parks Departments before entering Kew. After Kew he was propagator at Salford before moving to Manchester and then as general foreman to Great Yarmouth. After six years of war service he returned to Great Yarmouth and was appointed as Deputy Chief Superintendent at Liverpool in June, 1947.

Members will wish to congratulate W. L. Lavender (1901) who celebrated his 90th birthday in September, 1965.

A. F. Derrick (1960) is Sub-Editor of the London Publication *Home Gardener*. His previous position was as Foreman, Brentwood Parks Department, Essex.

J. P. Goodall (1965) left Kew in December, 1965. He was a student on the three-year course and was in his second year. On the 9th January he reported to the Royal Britannic Dartmouth Naval College where he is training for a Commission. Goodall was a Students' Representative on the Guild Committee and had worked hard for the Guild in this capacity. Both he and his mother contributed much to the design and colouring for the scarf.

A. J. Brooks (1903) is going strong at 86. He wrote in a February, 1965, letter that he had just finished pruning his 600 rose bushes.

K. G. Toft (1960) is Technical Assistant at Swindon Parks Department.

W. B. Pritchard (1925) retired from the post of Parks Superintendent of Llandudno in October, 1965.

J. D. Helm (1948), who was Assistant Superintendent, has been promoted to take his place.

A. Pedley (1959) took the post of District Superintendent of Parks to the London Borough of Bromley on 1st September, 1965.

W. E. Storey (1952) is now head of the Horticultural Division of the Greater London Council Parks Department.

P. H. Bridgeman (1962) is Arboricultural Assistant with the above authority and is concerned mainly with the moving of large transplants. (See also Awards.)

C. E. Cherry (1938) was appointed late in 1964 as Parks Superintendent of the London Borough of Sutton, and T. Lomas (1931) has been appointed his Deputy. Arising from the amalgamation of Local Authorities in Greater London (Greater London Government Bill, 1962), Sutton has joined up with Carshalton, Beddington and Wallington to form an administrative area of 10,732 acres, 167,000 population and an area of nearly 1,000 acres of parks and open spaces.

Cherry writes — "A Parks Superintendent's responsibilities however are not confined to the amenities of town-life. He also has to take care of the trees and grass verges in public highways, the floral displays at important intersections and the garden features and turf on Corporation housing estates. In Sutton he also has to administer the cemeteries, the allotments, school playing fields and grounds too. One of the most interesting jobs is the provision of floral displays and decorations at civic functions and Mayors' banquets.

R. C. Ward (1963) is Junior Landscape Assistant with the Harlow Development Corporation.

W. Howell (1925), whose retirement and tour of New Zealand and Australia was announced on page 415 of the 1964 *Journal*, has now retired to the Eastbourne area where he has settled down in a small but adequate and delightful bungalow. We wish Mr. Howell and his wife many years of happiness. (See Marriages and the article—"A visit to Kewites Down Under".)

G. Leaver (1963) took over the appointment of Technical Assistant with the County Borough of Warrington Parks, Cemeteries and Crematorium Department in February, 1965. (See also Marriages).

A. J. Porter (1959) was appointed to the staff of the Cheshire School of Agriculture, Reaseheath, to take effect on 1st January, 1966. His work will involve teacher training and also advisory work.

P. T. Bridgman (1962) has joined the N.A.A.S. and has been posted to the Rosewarne Experimental Station at Camborne. (See also p. 191, 1962 copy.)

C. Popham reports great progress on the Essex University site at Wivenhoe Park, Colchester, Essex. The huge building programme is going ahead, while the gardens and maintenance staff have been increased to cope with the ever growing work which builds up as development continues.

One of Popham's main tasks is connected with the work on the fine trees which abound on the Estate and in the establishment of a tree nursery. An account of the early work on this site appears on page 434 of the 1964 *Journal*, while there are full page photographs opposite pages 430 and 431. These were from blocks kindly lent to us by the University.

It is thought that the landscape architect, William Andrew Nesfield, who did so much of the layout at Kew, also worked on this site. The two existing lakes were also painted by John John Constable in 1816.

Clive is joint secretary of the University Horticultural Society and on 3rd July, 1965, the first show was held.

W. S. Marshall (1958) was appointed as Superintendent at St. Neots, Hunts., in October, 1965. This is a completely new department.

M. Gabe (1962) wrote in early in the year from Monmouthshire where he was Parks Superintendent of the Urban District Council of Nantyglo and Blaine. In this appointment he was able to effect a number of improvements to the Parks and Open Spaces in the district. One of the most important tasks which he undertook was the impounding of straying animals. When he first took over the department was overrun with sheep and horses. In all, 17 cows, 65 horses and 699 sheep were impounded. His wife sends her regards to all her old friends. Their daughter is almost three years old.

M. Gabe has recently taken the post of Parks Superintendent of the Borough of Workington, where he has to contend with sea winds instead of grazing sheep. A. Pedley (1959) previously held this post.

H. Bell (1963) was appointed Technical Assistant to the Parks, Cemeteries and Allotments Department of the City and County of Kingston-upon-Hull in November, 1965.

A. E. R. Goodale (1956) is now Deputy Parks Superintendent to the Borough of Epsom and Ewell. This has been created an autonomous department.

C. J. Giles (1962) returned with his family from Sabah, Malaysia, in August and intends to continue his career in this country. (See also p. 419, 1964, and p. 325, 1963).

J. S. McCracken (1957) moved up to Glasgow Botanic Gardens on 1st December to take up his appointment of Assistant Curator under E. W. Curtis (1956). The Curator, Curtis, was the previous editor of this *Journal* in 1956.

J. D. Snowden (1911), Vice-President of the Guild 1960-62, was presented with a commemorative plaque by the Grain Sorghum Production Association of Amarillo, Texas, at a luncheon party which was held at St. Ermin's Hall, London, on 7th July, 1965.

The inscription engraved on the brass plate of the plaque reads: "Award of Appreciation presented to Joseph Davenport Snowden for Distinguished Service to American Agriculture through Grain Sorghum Research and Development. February 25th, 1965."—This is the first time the award has been presented to anyone outside the United States. Dr. C. E. Hubbard and W. D. Clayton, of the Kew Staff, attended. Mr. Snowden has kindly presented two photographs of the ceremony to the Guild records.

Snowden and his wife, both aged 80, celebrated their Golden Wedding Anniversary on 10th July, 1965.

R. B. Anwyl (1962), Manager of Framptons Forbridge Nurseries near Chichester, has in collaboration with other members of his staff, devised a system which allows two moves to be made with pot chrysanthemums, involving very little work. It makes use of a bench trolley and under this system production has almost doubled. The method is fully described and illustrated in *The Grower*, 4th December, 1965, on page 895.

J. A. Hingston (1948) started as a Senior Lecturer in Horticulture at Askham Bryan near York. His special concern is a new advanced course in Recreational and Decorative Horticulture which caters particularly for men from public parks departments. After a good many years as a Parks Superintendent Hingston went to Wolverhampton and obtained the Certificate in Education from Birmingham University.

Many will remember his wife—Jean Sharps. Jim writes, "Jean and I (and the family) are enjoying living in York. It is a change from Ramsgate, but we are quite at home in the north of England—though to be truthful we both belong to the rival county of Lancashire".

KEW GARDENS CHRISTIAN FELLOWSHIP.

The Fellowship is continuing to make its presence felt in the Gardens. Those who attended the series of four meetings in the lecture theatre found them to be captivating and enjoyable whatever their points of view. The ever popular "Fact and Faith Films" were reinforced with the aid of two distinguished speakers—Dr. K. C. Lapworth of the National Physical Laboratory and A. Pont of the T.C.C.F.

The Bible was brought alive to those who attended the illustrated talk titles—"A Christian Naturalist in the Near East" given by C. C. Townsend. Every Wednesday "Quiet-time" meetings are held from 12 noon to 1 p.m. in St. Anne's Church choir vestry to which all are welcome.

B. F. HOWARD, *Hon. Secretary.*

KEWITES OVERSEAS.

B. L. Perkins (1950) took over as Superintendent of Nairobi Parks Department in December.

W. J. Karani (1965) is Assistant Superintendent of the above.

In a recent letter F. Parker (1952) gave the news that he has taken up residence in Georgia, U.S.A.

K. R. Woolliams (1963) wrote in from Bermuda in September. He writes, "Life here is very interesting although very different in most respects from that in England. At the moment we are suffering from water shortage. There is an exceptional drought and as all drinking water is rain water there is cause for alarm." He also pointed out, "Propagation can be difficult, due to humidity fluctuations more than temperature changes. It may be as high as 80% or as low as 50%". (Also refer to p. 325—1963 *Journal*.)

W. H. Patterson (1901), at the age of 93, has written in recently. We are pleased to learn that you enjoy the *Journal*, Mr. Patterson. (See also pp. 290-300—1963 *Journal*.)

H. F. Davies (1938)—a very comprehensive seed list reached the Gardens from EWANRIGG NATIONAL PARK, Salisbury, S. Rhodesia, where Davies is Curator. This Park is noted for its wide collection of indigenous and exotic plants and owes its origin to the late Harold Basil Christian who went to Rhodesia in 1914 and decided to farm there and where later he turned his attention to botany and horticulture. It was in the field of botany and in the study of the genus *Aloe* that he made some valuable scientific contributions. Latterly his attention was turned to Cycads. Some months prior to his death in 1949 he donated this garden with additional land to the Government. The cultivated area was then very small comprising some four acres but during the last fifteen years however, considerable development has taken place, more land having been placed under cultivation until the present sixty acres have been developed. The gardens are open to the public and have become widely known. Many species of birds are also attracted to this spot including Sunbirds which at times concentrate in large numbers to obtain nectar from the Aloes.

Mr. and Mrs. M. Dodge (1964). We heard from Mrs. Christine Burlingham Dodge in November, 1965. She is interested in working for a Master's Degree in library science. Both are working in the New York Botanical Garden, Christine in the library and Michael in the propagating department.

B. W. Till (1955) has been Superintendent of Parks at Carletonville, Transvaal, for nearly four years. He started this department from scratch and thus had a unique opportunity to build an ideal nursery.

A. D. MacArthur (1963) is Foreman Propagator with the Parks Department, Tauranga. (See also Awards.)

K. M. Lycett (1960) is now teaching rural studies in Zambia at Balovale, which he describes as one of the most delightful spots imaginable in Africa. His letter reads—"Balovale is an outstation in the North West of what was Northern Rhodesia. This is both an entomologists and botanists' paradise with a population of 1,000 natives and 24 Europeans. The drums are still used as a means of communication and we hear the answer from the Angola Border only a few miles away.

"My school and bungalow overlooks the Zambesi and the school garden runs toward it. The soil here is pretty poor but could be made productive, it is comprised of sand overlying old red sandstone. There are plenty of Paw-Paws, Mangoes, Cassavas, Locust Beans, Gourds and Guavas."

C. I. McDowell (1960) has written in recently from the Parks and Reserves Department of New Plymouth, New Zealand. They are looking forward to a Floral Festival to be held on the 16th, 17th and 18th February, 1966. He states that it is being held in conjunction with the Conferences of the Institute of Park Administration, N.Z., and the Royal New Zealand Institute of Horticulture. The Annual Dinner of the Kew Guild Branch is to be held on the 18th.

Mrs. M. C. Smith (Cowell, 1945) wrote in March. With her husband and their son Robert, aged 5, she has emigrated to Australia. Dr. Noel Smith has a lectureship in Plant Physiology in the Agronomy Department of the University of New England, Armidale, N.S.W., while Mrs. Smith was hoping to assist with compiling a local flora of the area which includes the New England National Park.

T. Whitehill (1962) was appointed Technical Assistant at Adelaide Botanic Garden in March, 1965. This post involves public advisory work and lectures to trainees in addition to supervisory work in the gardens. He has also visited Koonamore Station, about 250 miles north of Adelaide with a party of trainees in order to study the arid flora where the rainfall is eight inches.

Dr. M. C. Powell (1957) has written in recently from her new address in Guernsey. Miss Powell obtained a General B.Sc. in Chemistry and Botany in 1961 and a special degree in Botany, both from Birkbeck College of London University. During this time after leaving Kew she worked for the L.C.C. Parks Department at Victoria Park. She then took a post as research demonstrator under Professor Heath in the Horticultural Department and here presented a thesis on "Heterophylly in *Acacia melanoxylon*" and was awarded a P.H.D. in 1965. A post of temporary assistant lecturer in Botany at the Royal Holloway College followed before taking her present post at the States of Guernsey Horticultural Experimental Station.

A. D. Schilling, who was the Treasurer for the Guild until his departure for Nepal in February, 1965 (and he did a very good job, too!), has since then kept in touch with frequent letters.

He is the Technical Adviser to the Nepalese Government, with the multiple task of being in charge of the Botanic Gardens as well as being responsible for introducing economic and ornamental plants to Nepal. He is developing a native plant collection and at the same time building up an Herbarium of his own. He is based at Godavori, which is about seventeen miles from the town of Kathmandu, in fact he lives in the Botanic Gardens, which he is developing with a fairly free hand.

There are several projects under way, a large lily garden, a bog garden, vistas and propagating facilities. Native plants as they are collected are being established in suitable sites in the garden.

A rich haul of plants and herbarium specimens were collected on an exhausting three-week trip up the Lang Tang Valley. C. D. Sayers, who was staying in Nepal at the time, accompanied Schilling on this expedition, which went from the warm lower valley (105° in the sun) up to 14,000 feet in the snow. Climbing all the way on foot for about ten days.

Interesting incidents have been many, from a "man-eating leopard" in the garden, to a native saying his prayers before climbing a tree to collect an orchid.

Guild wearers of our tie may be interested to note that when the Duke of Edinburgh visited Nepal he was introduced to Tony, who was at the time patriotically sporting our tie. The Duke was particularly interested in it and asked what the tie was for.—(For those interested in obtaining this "status emblem" please see the note on page 539).

C. D. Sayers (1962) was awarded the Travelling Scholarship by the Worshipful Company of Gardeners (see p. 188, 1962 *Journal*). He returned recently and has sent in this account:—

"I left Kew in early September, 1962, and travelled by land-rover with a party of friends across Europe, the Holy Land and Iran to India. After spending six weeks in Kashmir and India, I journeyed by train to Ceylon, for a stay of three months.

From Ceylon, I sailed on the P & O liner *Arcadia* to Perth in Western Australia, and then by train to Adelaide. Here a very pleasant five months was spent at the Botanic Gardens working under T. R. N. Lothian (1940) and with A. J. Whitehill (1962) and R. Hardie (1954). I also took part in the Adelaide Botanic Gardens/University Expedition to the Musgrove and Everard Ranges in Central Australia with Dr. Eichler, who had worked at the Kew Herbarium.

In September, 1963, I visited Melbourne and Tasmania before flying from Sydney to Lae, New Guinea for a four month appointment with the C.S.I.R.O. Phytochemical Survey. My transfer to the herbarium staff of the Department of Forestry, Papua/New Guinea, was effected in March, 1964. This proved a wonderful experience and we spent twelve months on numerous expeditions, and with the aid of helicopters ventured into botanically unknown and unexplored country. Also I joined the University of Newcastle-on-Tyne/British Museum Expedition to the Finisterre Range

in New Guinea. Approximately 20,000 herbarium specimens were collected from New Guinea, Papua, New Britain and Bougainville.

In April, 1965, my journeys continued to Cairns and across Australia to Perth travelling 4,500 miles by train. A voyage on the S.S. Canberra took me to Colombo, where I took a plane to Kathmandu. Here I spent two months with Tony Schilling and his wife, accompanying them on a Government Expedition to the Langtam Himal. Also in Nepal I met A. Stainton, the plant collector, and later joined him in Srinagar, Kashmir, where we hired ponies and enjoyed two weeks of trekking in the mountains.

Leaving Kashmir just in time to avoid the fighting, we motored via the Khyber Pass to Kabul in Afganistan, but after a brief spell in the Hindu Kush we were forced to retrace our steps because of a serious outbreak of cholera. With the western borders closed to travellers, we returned to Nepal, and I returned by plane to London. During my travels I sent various living plants back to Kew."

Extracts from *Park Administration*, the Official Journal of the Institute of Park Administration (South Africa)—October, 1964—
 "Brief general comments on a trip to Europe and Britain—Kew is saving labour by the introduction of intricate automatic irrigation sets and the bedding there is getting bolder. They are experimenting with *Tibouchina semidecandra* (syn. *Lasiandra macrantha*) as an accent plant in outdoor summer beddings. Instead of 'Fings ain't wot they useter be' I would say that the standard of plants on display in the glasshouses is better than ever".

The July, 1965, issue of the above publication printed a list of the current Fellow Members. Among them are the following Kewites :—

- J. J. Aves (1939), District Superintendent, Parks Department, Pretoria.
- H. Bruins-Lich (1928), Director, Parks/Recreation Department, Pretoria.
- A. F. Gunn (1932), Landscape Designer, Parks Department, Johannesburg.
- R. E. Hardman (1935), Curator of Parks, Bulawayo, Rhodesia.
- H. M. Holloway (1930), District Superintendent, Parks/Recreation Department, Pretoria.
- P. W. Page (1938), Chief District Officer, Parks Department, Johannesburg.
- L. N. Prosser (1938), Director of Parks, Port Elizabeth.
- F. J. Stayner (1934), Curator, Karoo Gardens, Worcester, C.P.
- F. W. Thorn (1928), Director, Parks/Recreation/Beaches Department, Durban.
- C. C. van Ryneveld (1938), Deputy Director, Parks/Recreation/Beaches Department, Durban.
- H. Bruins-Lich (1928). Director of Parks, Pretoria, occupied the Presidential Chair of the Institute of Park Administration for the second time. He was first President in 1943/44 and again in

1963/64. Thus he presided at the 21st Conference in Pretoria. The January, 1965, Journal of the Institute, has a full report of this conference and also an account of the president's career. Bruins-Lich entered Kew as a student in May, 1925. Under the "exchange student" scheme he spent a year at La Mortola, returning to Kew in July, 1927. When he left Kew he became Horticultural and Agricultural Officer on St. Helena, a post he held for $3\frac{1}{2}$ years. In 1932 he became Curator of the Royal Botanic Gardens at Port of Spain, Trinidad. On his return to South Africa he obtained the post of Superintendent of Parks, Pretoria.

In his opening address to the Conference Dr. J. J. P. Op't Hof, the Secretary for Education, Arts and Science, emphasised the risk of modern education tending to become too much biased on the technical side at the expense of the broader humanities.

A. R. T. Buckley (1938), Horticulturist in the Plant Research Institute, Central Experimental Farm, Ottawa, recently sent in this letter which was so full of interesting news that we publish it complete:—

"You see Kewites in the strangest places. For example in the last year I have seen Al. Fordham (1937) Arnold Arboretum, in the Purple Tree at Rochester, N.Y. Jim Redman (1941) lolling on the Potomac in Washington, D.C., and Roy Forster (1957) knee deep in rhododendrons in Vineland, Ont. Once or twice a year I see Jim Taylor (1936) at Guelph. Last time was in June of this year when I discovered he had entered the 'stereo world'. This is bringing about problems because as Margaret Taylor points out the daughters have a yen for swing and she likes classical and the bawling of bagpipes is almost forbidden. About this time too I visited Les Laking (1941) who is, and has been for some time Director of the Royal Botanic Garden at Hamilton. He showed me new plans of the Centennial Rose Garden and new test plots which will be among the top landscape features of North America. Les is the new President of the Arboreturns and Botanic Gardens Association of North America. Jim Redman, who is Superintendent of the Royal Botanic Gardens at Hamilton, does a great job with the trial gardens and the terrific rock gardens, some of the best known in Canada.

A few years ago I met George Ford (1927) both at Cleveland and at Longwood Gardens, his home address in Pennsylvania. He is still making a splendid job of the greenhouses there and is responsible for many new introductions brought into the United States by the U.S.D.A. and Longwood. George is best remembered by those of us who worked in the Temperate House, as Charlie Raffill's long haired boy. Charlie never ceased to tell of George's ability as a grower of temperate plants under glass, and looking at Longwood you could really believe him.

At St. Louis in 1963 I saw George Pring (1906) and although he was too busy at that time for much more than a hello and good-bye, I can say he looked very hale and hearty for a man in

semi-retirement. At this same place I met M. Truman-Fossum (1936) who turned out to be a splendid economist in the florist industry. Driving through Toronto last April I dropped in to see A. E. Brown (1905) of Sheridan's Nursery Ltd. He appears about as young as he was when I first saw him twenty years previously. He is a kind of information centre for Sheridan's customers as well as being Secretary-Treasurer of the Company. About that time and also a few weeks earlier I had the occasion to go to Vineland on business. Here I saw Roy Forster in his native haunts. He is doing great things with rhododendrons and already has many bulletins and publications to his credit. I begin to see Roy more times each year as our interests coincide. R. H. (Bob) Keith (1937) is still in the seed business and is booming with the industry. I last saw him in June at Guelph and hope to see him again soon. His son Robbie is following in his footsteps and is doing a tremendous job in Horticultural education.

When I glance through the Kew Guild I notice many names of Kewites who have come to Canada and the U.S. in more recent years and many older ones I have not yet met. I shall endeavour to seek out those people next time I am near their home cities. Two people I haven't yet seen on this side are Howard Swift (1937), who is now Assistant Director of the Cleveland Garden Centre, and Don Watson (1937), the other half of the Buckley-Watson deal which saw me high tailing it to Canada and Don to Kew. I think Don is still in Hawaii and according to Michigan University people I have met recently it is going to take a lot of persuasion to pry him loose. The last time I saw Howard Swift was on the Palm House steps with crutches, but I am looking forward to seeing him next year as with some other Kewites when we take in the International Horticultural Convention at Maryland, U.S.A.

While on this subject of the Convention at Maryland, I would like to advise all those Kewites from Europe who are going to attend, to expect it to be very hot, from 90° to 95° F. and very humid (Palm House atmosphere). Don't bring your woollies or carry a rain coat. (It might rain but a plastic rain coat can be bought cheaply). Maryland University is a tremendous place (has its own airport) and is not far from Washington, D.C., the American Capital. Lots to see, and be prepared to stay awhile".

We thank you Mr. Buckley.

MARRIAGES.

M. J. Griffin (1963) to Miss J. Dennis (1964) at St. David's Church, Neath, on December 27th, 1965.

G. J. Leaver (1963) to Miss A. Lamkin of Brentford on December 19th, 1965. Miss Lamkin worked at the P.O.S. Bank in Ruskin Avenue.

W. Howell (1925) to Miss H. Hyde at Tottenham on November 4th, 1965.

KEW NEWS

The following promotions were made in February : —

R. L. Adams from Gardener Grade 1 to Foreman, Aboretum Nursery.

R. H. Rule from Gardener Grade 1 to Foreman, Palm House.

J. R. Woodhams from Propagator to Foreman, Tropical Pits.

W. D. Clayton, Principal Scientific Officer, Herbarium, attended the International Grassland Congress at Sao Paulo, Brazil, early in 1965. He also made extensive collections of grasses and sedges.

The Director, Sir George Taylor, visited South-East Asia and Australia in the spring of 1965. He called at Singapore to see the New Herbarium. From there he visited Perth, Adelaide, Melbourne, Canberra, Sydney and Brisbane, visiting botanical establishments in each city. He went on to Lae, New Guinea, to open the new Herbarium, and the return journey was via Fiji and Hawaii.

P. F. Hunt, Scientific Officer, Herbarium, was a member of the Royal Society Expedition to the Solomon Islands. He left in June, 1965, and returned in December. He collected numerous living orchids and ferns for the Gardens.

Dr. and Mrs. C. R. Metcalfe paid a private visit to Jamaica early in 1965. They returned home via Bermuda.

J. P. M. Brenan was elected Botanical Secretary of the Linnean Society of London at the Anniversary Meeting on 24th May, 1965.

Members will wish to extend to the Director, Sir George Taylor and to Lady Taylor their best wishes on the occasion of their marriage at Hexham on 2nd August, 1965.

Dr. C. E. Hubbard, C.B.E., D.Sc., F.L.S., retired on 30th November, 1965, from the post of Deputy Director and Keeper of the Herbarium and Library. Dr. Hubbard entered Kew in 1920 as a student gardener and subsequently became an Assistant (Temporary Technical) in the Herbarium. His first paper, on a fodder grass in Africa, was contributed to the *Kew Bulletin* in 1926, and on this group, the grasses, he became a world authority. A projector and a cheque were presented to Dr. Hubbard from the staff at a ceremony in Wing A on Thursday, 2nd December. The presentation was made by Mr. J. P. M. Brenan, his successor.

Dr. D. A. Reid, Principal Scientific Officer (Herbarium) visited Czechoslovakia in September under the auspices of the British Council and collected Fungi in the Tatra Mountains and worked in the Prague Herbarium.

L. L. Forman, Senior Scientific Officer (Herbarium) made a private visit to the U.S.S.R. from 29th August to 12th September. He called in at the Leningrad Herbarium and met several of their Botanists. He also visited the Botanical Institute at Kiev, where

the Turczaninov Herbarium is preserved and in the Crimea he visited the Nikita Botanic Garden which is beautifully situated on the coast of the Black Sea near Yalta. This garden of 70 acres—chiefly arboretum and rich in conifers—extends up a mountain side to about 1,000 ft.

F. N. Hepper, Principal Scientific Officer, Herbarium, took charge of the Tropical African Section on 1st December, in place of J. P. M. Brenan.

R. D. Meikle, Principal Scientific Officer, Herbarium, took over the general supervision of the preparation of the "Index Kewensis" in August, a task previously undertaken by the late Mr. Sandwith.

H.M. The King of Sweden visited Kew on the 16th November, 1965, and saw the living collections, especially the rhododendrons.

The Director, Sir George Taylor, placed an evergreen wreath which included plants associated with the Hookers, on the Hooker Tomb in Kew Churchyard on 12th August, 1965.

R. L. Adams, Foreman of the Arboretum Nursery, is Official Bird Observer for the Royal Botanic Gardens. Mr. L. Baker of 55 Spencer Road, Strawberry Hill (not one of the Gardens Staff) is also recognised as such.

FIRE BLIGHT—Sporadic outbreaks continued through the late spring and early summer. The Cotoneaster collection which had suffered so badly in 1964 was not affected to any great extent as a large number had been propagated and the old plants destroyed. The Chaenomeles and Cydonia collections have suffered from the trouble almost continuously during the outbreaks of 1964 and 1965. In view of this the entire collection has been removed after the establishment of propagated material in the nursery. It will be interesting to see how this affects the situation during 1966.

On the night of 27th February, during a strong gale, a 60 ft. section of the wall between the rock garden and the order beds was blown down almost to ground level. Rebuilding is now under-way and will be completed during 1966. A large branch was also blown out of the top of *Ulmus viminalis* by the Turkey Oak in Broad Walk.

The Temple of Bellona (1760) near Victoria Gate was opened to the public daily for the first time this year. King William's Temple has been open daily since 1963.

The only tree at Kew of the rare Wilson introduction *Cladrastis wilsonii* was propagated during the year. After being air-layered for several months a rooted part was successfully established in an ordinary rooting medium.

A new Public Path has been opened in the Queens Cottage Grounds. This has been made from the existing service road which took lorries and tractors to the fire and rubbish tip. The new road forms a right-angle with the existing public path, and extends no further into the grounds than this. Since the traffic in this area has

decreased, and with the encouragement of ground cover in selected patches, it is hoped that it will be improved as a bird sanctuary.

Brentford Gas Works is slowly being dismantled and a new sky-line develops as this takes place. The fact that it had closed down was mentioned on p. 328 (1963). Growth of the conifers in particular has greatly improved and the cleaner air is a contributory factor. The extended irrigation systems have also improved growing conditions generally. In one instance a young tree of *Picea smithiana* has put on 8 ft. of growth in the last three years.

Work on the 17th Century Garden behind Kew Palace has continued through the year.

The Orchid Pits have been extended as part of a rebuilding programme which will cover the entire department.

The new Filmy Fern House was opened to the public for the first time on 7th May. The most important feature, in addition to the fact that humidity is controlled by mist, is that the public have no access to the actual growing space. The plants are viewed through plate glass panels.

At about 3.25 p.m. on Friday, 10th December, following an abnormally high tide, much of Kew Green and Ferry Lane was flooded and the flood-water reached a point on the opposite side of the road just beyond the Herbarium Gates. Many houses on Kew Green were flooded, so also was Kew Observatory. The traffic over Kew Bridge was stopped for a time as the road from the traffic lights to the bridge was under water. The flood-water poured over the wall into Queens Cottage Grounds and reached to within 50 yards of the fenced pathway.

During the early part of the year a series of changes were completed in the Shaft Yard. Old Kewites will remember this corner of Kew with the old excavated Coke Dump and tunnel to the Palm House (refer to p. 60, 1961). Now the dump has been built over and has been converted into a store beneath smart modern offices, occupied by the Engineers Department of the Ministry of Works. Also in this area are new messrooms, toilets and stores for the Decorative Department and the Constables.

During the second week in August the first concrete for the foundations of the new Herbarium and Library buildings was laid and the steps leading into the north end of Wing A were demolished. To make way for this development, the two large specimens of *Cedrus libani*, growing between the Herbarium and river, were felled early in the year. The annual rings indicated that they were approximately 190 years old.

Wakehurst Place. The control of the gardens and woodlands at Wakehurst Place was transferred from the National Trust to the Royal Botanic Gardens, Kew, on 1st January.

R. Shaw, Assistant Curator of the Younger Botanic Garden, Benmore, Scotland, was appointed Assistant Curator in charge of Wakehurst from 2nd August, 1965. (p. 421 of 1964 *Journal*).

In early March a large Mole was trapped in the shrub border by the Temple of Arethusa (containing the War Memorial Commemorative Tablet). It was thought to have been introduced with the loam which was stacked nearby in the Shaft Yard. It was causing damage among dwarf Rhododendrons and one or two were almost completely buried by its workings.

Renovation to the structure of House 15 started in the Autumn. The Tropical Water Lilies have been moved to the tank of No. 10 and without plants and glass the whole presents rather a strange appearance.

In the spring a small Cafeteria opened near the entrance from the Gardens to the lower Nursery. It is open throughout the year for light refreshments only.

The clearance of mud from the floor of the lake continued during November from the point reached during the previous year (see p. 403, 1964). However only 200 cubic yards of mud were cleared owing to the operation being hampered by wet weather.

For the second consecutive year the pair of Black Swans nested and produced two broods (5 + 5). The male showed its annoyance over the lake cleaning operation by attacking the tractors, but these remonstrations came to an end when one of its wings caught up with a trailer wheel. Recovery is now complete after spending two months with the wing in splints—a wiser bird we hope!

George Robert White Medal of Honor. This fine gold medal was awarded to the Royal Botanic Gardens in 1964 by the Massachusetts Horticultural Society for "eminent service in horticulture" and was presented to the Director on Friday, 18th June, 1965.

Under the Will of the late N. Y. Sandwith, Principal Scientific Officer, Herbarium, the Bentham-Moxon Trust is to receive £1,000, the income from which is "to be applied for assisting and encouraging any member of the Kew Herbarium staff aged under 40 to make a collection of dried plant specimens for the Kew Herbarium in any tropical country."

Students' Day was held on Saturday, May 8th, and over a thousand attended. These were made up of members of staff and students from the various Universities, Training Colleges, Institutes and Schools, Societies. There were 48 special guests.

Exhibits were arranged which illustrated various aspects of the scientific work of the staff of the Royal Botanic Gardens and these were on display in the Herbarium and Jodrell Laboratory from 1 to 6 p.m.

In addition three lectures, each of half-hour duration, were given in the Jodrell Laboratory Lecture Theatre on "The Evolution of the Flower" by Dr. R. Melville (Senior Scientific Principal Officer, Herbarium); "Mendel in Perspective" by Dr. K. Jones (Principal Scientific Officer, Jodrell Laboratory); and "Some Applications of Plant Anatomy" by Dr. C. R. Metcalfe (Keeper, Jodrell Laboratory).

Members of the staffs of the Herbarium and Library, the Museums of Economic Botany and the Jodrell Laboratory were in attendance at the exhibits to answer questions, and Guides, under the leadership of Miss R. Angel (Guide-Lecturer), were available to conduct parties round the Gardens. The Visitors took tea in the Orangery.

Three Christmas Holiday Free Public Lectures were given at Kew on the 29th, 30th and 31st December. The lectures were "Plant Hunters" by Miss R. Angel; "Plants, People and Places in West Africa" by F. N. Hepper; and "The Botanical Detective" by Dr. C. R. Metcalfe, in that order.

KEW BOTANY CLUB.

At the Annual General Meeting A. R. Smith was re-elected as Chairman with the following officers: A. Rich, Hon. Sec.; R. Ince, Hon. Asst. Sec.; and G. N. Graham and B. Howard, Committee Members. During the A.G.M. there was a discussion upon the advisability of continuing the club but owing to the fact that the plant collection has now been made compulsory and with the hope that the next intake of students would swell the attendance, the discussion was left for the following A.G.M. The collections will be of great educational value as the specimens have to be arranged according to the various ecological habitats.

The past year's programme was poorly attended. As in previous years the Grass trip was most successful as was the excursion to Cuckmere Haven, near Seaford, but this was arranged during working hours. During the winter 1964/65 the following lectures were given: "Collecting and Preparing Specimens" by A. R. Smith; "Conservation" by P. F. Hunt; "British Sedges" by Miss S. Hooper; "Wet Acid Habitats" by R. D. Meikle; "British Grasses and Grassland" by Dr. C. E. Hubbard; "Conifers in Britain" by D. Hunt; "British Compositae" by C. Jeffrey; "British Orchids" by P. F. Hunt; "Coastal Plants" by D. Philcox.

The winners of the prizes are as follows:—

The Dümmer Memorial Prize for the student who submits the best collection of British Plants was awarded to:—

B. F. Howard.

The Proudlock Jubilee Prize for the next best collection was awarded to:—

J. O'Connor.

A. RICH, *Hon. Secretary.*

THE PROUDLOCK TENNIS COMPETITIONS

are held annually

CUPS FOR LADIES' AND GENTLEMEN'S SINGLES

Only members of the Kew Guild and their families are entitled to compete

Entries must be made to the Hon. Secretary by 1st June, 1966

LEISLER'S BAT

During tree-pruning operations on 20th December, 1965, in the Royal Botanic Gardens, Kew, a partly decayed bough was sawn off a common lime tree near the Main Gates. Having fallen some forty feet to the ground, the Staff Members, Messrs. D. Waddell, M. Macken and G. Greenough, who were doing this work, heard squeaking coming from within the bough. On investigation they found that it was coming from a cavity, the voice being that of a small bat, rudely disturbed in its hibernation, but luckily unharmed.

Knowing my interest in the wild fauna of the Royal Botanic Gardens, Mr. Waddell brought the bat to me for inspection. At first sight it seemed to me to be unlike a Pipistrelle, the only small bat known for certain to occur in the Gardens. On attempting to run it down in the key to British bats prepared by the specialists in bats, Mr. Michael Blackmore, in H. N. Southern, *The Handbook of British Mammals*, the bat came down to Leisler's Bat, a species regarded as rare in England, but apparently recorded from Surrey, yet definitely unknown from the Gardens.

As it seemed possible that the bat was this unusual species, I took it the same evening to Mr. Blackmore for examination. He was able immediately to confirm that it was in fact Leisler's Bat (*Nyctalus leisleri* (Kuhl)), the first definite record for the biological vice-county of Surrey. He told me that the two previous records for Surrey, one from Hindhead and one from Epsom were both identified in flight, when it is easy to mistake Leisler's for an immature Noctule. Mr. Blackmore said that it was also the record nearest to central London, the other London record being from Woolwich.

The following day the little creature was returned to the tree in which it had hibernated. It was not interested in a hole some fifteen feet up the trunk, but when shown a cavity in a horizontal bough some thirty feet up, quickly disappeared from sight.

Next summer a special watch will be kept for bats at the northern end of the Gardens, in the hope of proving that a flourishing colony of Leisler's Bats exists. It is interesting that a mammal new to the Royal Botanic Gardens should be found after over sixty years of observation and recording.

Readers who are interested in these creatures should study the excellent booklet in the *Sunday Times Animals in Britain* series, No. 18 of which is entitled *Bats: Noctule, Leisler's and Serotine*.

There is a flourishing colony of Noctule Bats in the Royal Botanic Gardens, Kew, and on a suitable summer evening it is possible to see thirty or forty of these large and powerful fliers hawking for insects over the Lake and the nearby reach of the Thames. So difficult are the habits of these bats to observe, that the roosting site, probably in a cavity in a tree, where this colony congregate during the day, is quite unknown and has yet to be discovered.

E. MILNE-REDHEAD.

KEWITES AS AUTHORS.

STELLA ROSS-CRAIG

"Drawings of British Plants" Part XXI. *Boraginaceae, Convolvulaceae, Solanaceae* (1965). 10s. 6d.

W. RICHTER.

"The Orchid World." English translation edited by Peter Hunt. Studio Vista (1965). 63s. 0d.

D. A. REID.

"Monograph of the stipitate stereoid fungi. J. Cramer (1965). D.M. 100.

THE WEATHER AT KEW DURING 1965.

"Cool, cloudy and wet" was the official summing up for the country as a whole and Kew was certainly no exception. Never once during the spring and summer period did irrigation become an urgent problem and more often it just was not necessary. Reference to the list on pages 444 to 446 (1964 *Journal*) gives an indication of the crippled condition of most of the winter flowering subjects when the year opened. The spring developed uneasily with an occasional light covering of snow. One of the first displays was of *Rhododendron x praecox* in late February, but it was badly frosted in a cold spell around the 25th-26th. The month was also very dry and this allowed the winter's work to be completed. March was heralded in with a cold biting east wind, a chilly welcome for *Arbutus x andrachnoides* (*andrachne x unedo*) which was flowering to such a degree that the display far exceeded that of either parent. On the 3rd blizzards hit much of Britain and during the following day snow continued on and off for most of the period. However it did improve after a few days and on the 16th *Abeliophyllum distichum* was out in flower with the earliest *Forsythia*—*F. giraladiana*. During March the rainfall was above average, the first time for eight months while the thermometer reached 63° F. on the 28th, the highest for March since 1961. *Pyrus*, *Prunus* and *Forsythias* were out with the summer frocks and picnicing parties. The whole range of *Magnolias* flowered happily during April with no damaging frosts. It was in many respects a typical April with showers and sun but often with a threat that the hoary beard of winter would reappear.

Winter seemed far behind on the 14th May when a temperature of 85° F. was recorded—the hottest May day for twelve years. Under these conditions the spring blossom went off quickly, in fact, this happened generally throughout the whole season. All too quickly we seemed to be with the mid-summer flowering subjects. On the 19th July, *Catalpa speciosa* was in flower in dull disappointing weather. Workers returning from holiday complained bitterly of their experiences on rain soaked beaches as they took up hoes and mowers in an attempt keep the gardens tidy. July was a particularly cool month.

So the summer wore on, never were the temperatures to reach the 80's again although there was a warm spell in the second week of August. Then at last, as if to compensate for the wet, cloudy days of earlier months, the thermometer rose on the 4th October to 75° F.—it was described by one paper as a “mini-summer”. The ever cheerful gardeners remarked—“Yes, but we shall pay for this later!” It was the fourth successive October with the rainfall below average. Kew has had a smaller rainfall only twice in the last 85 years. The sunshine for Kew during this month was 140 hours, 42 above the average. The autumn colour was poor but this seemed to be the rule over most of the country. In the heat the dying leaves had shrivelled up making colour impossible.

During the second half of November it was unusually cold—on one day, the 25th, there was a drop of 9° F. in two hours. This delayed the winter's work and any hopes of making good progress faded as December developed into a really wet month. Many of the winter flowering shrubs opened early under the very mild conditions and the displays of *Hamamelis*, *Prunus subhirtella autumnalis* and *Chimonanthus praecox* were outstanding. The weather over Christmas was perfect. Kew, with 6.4 hours, had its sunniest December 26th since before 1880. Then afterwards a short but intense cold spell—72 hours of continuous frost but again on the 29th, mild wet weather spread from the west—a rapid thaw followed by a rise of 25° F.—a common remark—“no wonder we have colds with such changeable weather”. A weather-wise member of the staff remarked—“When there is ice to bear a duck in November it will be a mild winter”. The November ice certainly bore ducks and even swans.

RAINFALL AND TEMPERATURE READINGS FOR KEW IN THE YEAR 1965.

Month 1965	Rainfall in Inches	Temperature (in Fahrenheit)		Grass Av.
		Maximum Av.	Minimum Av.	
January ...	2.06	43°	34°	33°
February ...	.37	42°	34°	32°
March ...	1.99	51°	36°	34°
April ...	1.55	58°	40°	38°
May ...	1.54	64°	47°	45°
June ...	1.69	69°	50°	48°
July ...	2.58	67°	53°	50°
August ...	2.07	70°	52°	51°
September ...	3.93	64°	47°	45°
October ...	.94	62°	47°	45°
November ...	3.63	48°	35°	33°
December ...	4.02	48°	36°	33°
Total ...	<u>26.37</u>			

PLANTS IN BLOOM IN THE OPEN AT KEW
ON CHRISTMAS DAY, 1965

BERBERIDACEAE

- Mahonia bealei (Fortune) Carr. just coming out
Mahonia 'Charity' half out
Mahonia fortunei Fedde just coming out
Mahonia japonica DC. 'Hiemalis' well out

BUXACEAE

- *Sarcococca confusa Sealy out in shelter

CALYCANTHACEAE

- Chimonanthus praecox (L.) Link well out, very showy
Chimonanthus praecox (L.) Link a few flowers out
var. concolor Makino

CAPRIFOLIACEAE

- *Lonicera x purpusii Rehd. well out
*Lonicera standishii Jacques well out
*Viburnum x bodnantense Aberconway 'Dawn' well out
*Viburnum x bodnantense Aberconway 'Deben' well out
*Viburnum x carlcephalum Burkwood well out
Viburnum foetens Decne. full out but scorched
Viburnum fragrans Bunge well out
Viburnum fragrans Bunge 'Farrer's Pink' well out
*Viburnum grandiflorum Wall. on wall, in bud
*Viburnum tinus L. some bushes out

COMPOSITAE

- Othonnopsis cheirifolia (L.) Jaub. & Spach very sparse in shelter

CRUCIFERAE

- *Iberis sempervirens L. 'Snowflake' scattered flowers
*Iberis jordani Boiss. a few flowers in shelter

ELAEAGNACEAE

- Elaeagnus macrophylla Thunb. well out

ERICACEAE

- Arbutus andrachne L. } most of flowers singed in
Arbutus x andrachnoides Link } November but a few
intact
*Erica carnea L. 'Praecox Rubra' well out
*Erica carnea L. 'Winter Beauty' well out
*Erica x darleyensis Bean well out
*Erica x darleyensis Bean 'Arthur Johnston' well out
*Erica x darleyensis Bean 'George Rendell' well out
*Erica x darleyensis Bean 'Silberschmelze' well out
*Erica lusitanica Rudolf one plant only in flower
*Erica mediterranea L. 'W. T. Rackcliff' quite showy
Pernettya mucronata Gaudich a few flowers on a shel-
tered plant
Rhododendron x pulcherrimum Marnock 'Nobleanum' a few buds opening

HAEMODORACEAE

- Liriope muscari (Lour.) Bailey few spikes in shelter

HAMAMELIDACEAE

- *Hamamelis japonica Sieb. & Zucc. open fully
*Hamamelis japonica Sieb. & Zucc. 'Flavopurpurascens' open fully
*Hamamelis japonica Sieb. & Zucc. 'Hiltingbury' open fully
*Hamamelis japonica Sieb. & Zucc. 'Jelina' open fully
*Hamamelis japonica Sieb. & Zucc. var. zuccariniana (Masters) Gumbleton open fully

*Hamamelis mollis Oliver	...	...	...	open fully
*Hamamelis mollis Oliver 'Brevipetala'	...	...	...	open fully
*Hamamelis mollis Oliver		var. pallida Chittenden		open fully
*Hamamelis vernalis Sarg	...	...	...	open fully
*Hamamelis virginiana L.	...	...	...	open fully
*Parrotia persica C. A. Meyer	...	...	...	just opening

OLEACEAE

Forsythia x intermedia Zabel f. spectabilis				
		Koehne		very sparse in shelter
Fraxinus angustifolia Vahl	...	...	...	half out
*Jasminum nudiflorum Lindl.	on wall; a few flowers out

POLEMONIACEAE

Phlox procumbens Lehmann	very sparse in shelter
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RANUNCULACEAE

*Helleborus abschasicus A. Braun	full out
*Helleborus argutifolius Viv.	just opening
*Helleborus niger L. 'Potters Wheel'	...	...	...	just opening
*Helleborus orientalis Lam.	...	...	...	just opening

ROSACEAE

Chaenomeles japonica (Thunb.) Lindley				
		ex Spach 'Mallardii'		on wall, few flowers
Crataegus monogyna Jacq. f. biflora		(West) Rehd.		fair scattering of flowers
Prunus subhirtella Miq.		var. autumnalis Makino		
Prunus subhirtella Miq.		var. autumnalis Makino 'Rosea'		
Helianthemum chamaecistus Mill.		'Watergate Ruby'		very sparse

VIOLACEAE

Winter Flowering Pansies	fair scattering, especially in sheltered beds
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SUMMARY

The plants which are marked with an asterisk remained unaffected by 72 hours of frost which followed in a few hours after the check was made.

The Ericas, Loniceras and Hamamelis came through with flying colours. What wonderful plants these are! Although five of the Viburnums are listed as coming through only one did so unscathed—*V. tinus*. It should also be noted that the flower display of Mahonia 'Charity' was ruined for the season for the structure of the whole inflorescence had broken down completely. There were no flowers on *Iris unguicularis* or its forms—had the November frost delayed this plant? Nor were there any Camellias. The cold November had perhaps given the deciduous subjects their dormant period but it had delayed some evergreens.

OUR FOUR SEASONS AT KEW

We went to Kew in Springtime, when the people gathered there,
 As the flowers woke from slumber and the birdsong filled the air.
 Each bulb and bud was bursting so impatient to be seen,
 To flaunt a crown of glory, like a proud and lovely queen.
 The sun was warm and gentle and the wind had lost its sting,
 But the crowds increased in number when we went there in the
 Spring.

We went there in the Summer, with ten thousand others too,
 And watched the blossom bursting in a multi-coloured hue.
 Soothed by Summer's splendour we reclined upon the grass,
 Surrendered to the sleepy sun, and let the hours pass.
 All Nature seemed contented in a drowsy sunsoaked spell,
 But the place was full of visitors so far as I could tell.

We went to Kew in Autumn, when the leaves were tumbling down,
 A russet tinted picture, copper red and golden brown.
 Rich tones of grey and silver, with the leafmould soft and sweet,
 We rustled through a carpet laid by Nature at our feet.
 The wind came by in whispers on this mellow Autumn scene,
 And those who came to visit there were few and far between.

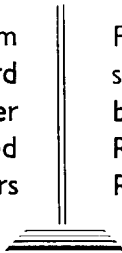
We went to Kew in Winter, when the trees stood black and stark,
 The damp moss clung like velvet on the rough and broken bark.
 The fragrant touch of Spring was gone, and warmth of Summer
 days,
 No enchanted landscape glowed, softened by Autumn's haze.
 But the ice-bound lake was burnished when the Winter sun came
 through,
 And we owned the World around us, just the two of us at Kew.

A. W. EVERETT, *Night Watchman—Herbarium.*

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NOTES FROM THE TEMPERATE DEPARTMENT FOR 1965.

The year started with scaffolders and painters and the interior was brightened up considerably. During this operation one painter fell forty feet from the centre scaffolding, but luckily he landed on the soil of a bed and sustained only bruises. During the spring all the beds were top dressed with a leafy mixture and this resulted in some very good growth throughout the summer. Early in the year the ramp up to the Temperate House terrace was widened to 7 ft., which allows tractors and trailers to bring material up to the standing out ground. This entailed the rebuilding of the dry stone retaining wall.

As winter approached contractors arrived to lay in a 6in. diameter low level ring main, connecting all the six large rain water tanks which are under the terrace. Mechanical diggers churned through the pure sand and gravel soil to a depth of twelve feet and consequently much of our time was spent returning.

Bed No. 30 by the stairs in the S.E. corner was excavated down to drainage level and a well-drained compost was used to replace the partly stagnant soil. The intention is to plant S. African plants in the bed, with the accent on those preferring a light free drained position.

Amongst the plants, notable is the flowering of the large Doryanthes in the S.E. corner of the Australian House, two spikes were produced in May from separate rosettes, these are now 15 ft. and 17 ft. respectively and should open their flowers in March, 1966. The large *Luculia pinceana* in the main house recovered its growth this summer, to produce a beautiful display of pink scented flowers in December.

The propagating pits now have a mist unit installed, which is producing good results. Those who once worked in the Temperate House will no doubt smile when they learn that we have a staff mess room complete with gas cooker, wash basin, hot water, etc. This was made possible by conversion in the south stoke hole with additional steps out to the terrace.

J. B. SIMMONS, *Assistant Curator*, December, 1965.

LIVE PLANTS IN THE MUSEUM, 1965.

Between January and March the Plant Table in the general Museum carried an exhibit showing how evergreen and deciduous trees adapt themselves to winter conditions.

Over 500 British or naturalised species of plants were shown on the Plant Table during the spring, summer and autumn months. The amount of material which we received increased to such an extent that an extra show case or table was built to hold it. This new structure has a table top backed with pegboard so that it somewhat resembles a Welsh dresser without shelves. It is lit from above, is movable and provides very useful extra display space.

This new table is kept for material from either single habitats, of one or more families, or for plants with a certain character in common, i.e., fruiting. The extra material coming in is, it is thought, due to the steadily increasing interest taken in this exhibit by both staff, students and our outside contributors.

As in earlier years, thanks are due to the staff of the European Department in the Herbarium for their help in naming material. Our thanks are also due to them, and to all the other contributors who either brought in, or sent us so much excellent material. Without their help this exhibit could not continue in the same manner. Again as usual, these remarks apply to the "Moss Box" which has been in continuous use throughout the year.

A couple of months before Christmas the living plants were replaced by an exhibit on horse and sweet chestnuts. This showed something of the history and uses of the two trees, about which the general public really know very little.

The Christmas exhibit this year was "Nuts and Wine". On one side there was a selection of bottles showing the wide range of wines produced in the world and something about them. On the other was a selection of the nuts eaten in this country, especially at Christmas, with descriptive labels.

ROSEMARY ANGEL.

THE KEW THREE-YEAR DIPLOMA COURSE.

The new accommodation in the Jodrell Lecture Theatre and Laboratory has now been in use for one year and is a tremendous improvement upon the old facilities of the Iron Room. In the drawing class room some excellent landscape design work is being done—we are very fortunate to have as lecturer, Mr. John Brookes, the landscape architect, who until recently taught this subject at "The Grotto".

A revision of the curriculum has been made. This has restored one of the original strong points of the Kew training, that of continuous work with the charges. The course has been revised in order to allow one substantial period of 12 months when students are mainly on practical work. This gives the first-year students a settling-in period, while in the second and third years, a more unified course of theoretical instruction will be given during working time.

Another innovation has been the series of film evenings at which horticultural and general interest films have been shown. These have alternated with a series of talks from visiting specialist speakers. Also connected with visual aids, a large collection of black and white photographs is being made of horticultural subjects, with over 1,000 to date. There is a similar number of 2" x 2" slides. These are being used in the lecture course.

L. PEMBERTON, *Supervisor of Studies.*

MUTUAL IMPROVEMENT SOCIETY.

The Annual General Meeting was held on September 6th, 1965, with G. E. Brown in the Chair. The following Officers were elected for the year 1965/66: Chairman, G. J. E. Yates; Vice-Chairman, S. A. Pearce; Hon. Secretary, C. P. Wood; Hon. Assistant Secretary, A. R. Keevil; Hon. Treasurer, A. J. Hale; Committee Members, R. Ince and A. Rich.

SECRETARY'S REPORT FOR THE 1964-65 SESSION.

Probably the most important single item to record is that the meetings were held in the New Jodrell Lecture Theatre. The main aim of the Society is to give members an opportunity to speak in public and thus to increase their confidence. In this respect we had a most successful season. On one occasion every member contributed toward the discussion. There were twenty-one full lectures which is the maximum number recorded in recent years. In addition there were two lecturettes, three debates and a Brains Trust.

The average attendance figures at the meetings were considerably lower than during the previous year. This was reversed when the Society arranged three evening trips—to The Savill Gardens, Windsor Great Park; The Greater London Council's Tree and Shrub Nursery, Eltham; and Messrs. Geo. Jackman's Nurseries, Woking. Both the Wisley and Cambridge debates were well attended.

The prizes for the Society's activities were awarded as follows:—

The Hooker Prize (given annually by the Director and awarded to the member who is considered to have done the most to help the Society)—A. Barber.

The C. P. Raffill Prize (given this year by the Guild and awarded to the best paper given during the session by an eligible member)—H. Fleigner for his paper on "The Botanic Garden, Munich".

The Society's Prize. Raised by the subscriptions of members and awarded to the member who has taken the most active part in the discussions and debates—F. A. Overland.

Finally I would like to thank both Assistant Curators, G. E. Brown and J. B. Simmons for their Chairmanship, the Assistant Secretary, J. O'Conner and Committee Members C. Hart and A. L. Barnes. Also the Treasurer, A. J. Hale.

A. BARBER, *Hon. Secretary* 1964/65

SYLLABUS: OCTOBER, 1964—MARCH, 1965.

Oct.	7	Art of Public Speaking	...	...	...	E. W. Macdonald
..	14	Gardens for the Blind...	...	...	...	A. Barber
		Aspects of Tropical Propagation	...	...	...	J. B. Simmons
..	21	The Problem of Perennial Weeds on Rock Gardens	...	...	...	C. Roome
..	28	Lily Gardening	...	...	...	R. K. Edwards

Nov.	4	An American Tour	R. C. G. Leeman
"	11	Rhubarb	J. Fisher
"	18	Horticultural Aspects of Cemeteries and Crematoria	K. Robinson
"	25	Plant Collection for Learners from a Learner	J. Endall
Dec.	2	The Design and Construction of a Rose Garden	F. A. Overland
"	9	Hedges and Windbreaks	B. F. Howard
"	16	Internal Debate—Speakers: A. R. Keevil, J. Beswick, B. F. Howard and E. Saxon	
Jan.	6	Gardening (and other things) in Iceland ...	C. Hart
"	13	Municipal Decorating	M. Lee
"	20	The Work of a Technical Assistant	J. Beswick
"	27	Maintenance on Housing Estates	E. Saxon
Feb.	3	The Botanic Gardens, Munich	H. Fleigner
"	10	Herbicides	C. Gordon
"	17	Bee Keeping in Horticulture... ..	D. Waddell
"	24	Maples	W. Bessler
Mar.	3	Mulching	G. Graham
"	10	Public Parks in Nairobi	W. Karani
"	17	Lecturette Tree Transplanting	K. Hobbs
"	24	Kew-Wisley Debate (at Kew)—Speakers: C. Gordon and D. Coleman	
		Kew-Cambridge Debate (at Cambridge)— Speakers: C. Hart and K. Robinson	

SOCIAL SECTION.

The activities of the Social Section have been well supported this year, and plans for more frequent organized events are well under way.

The room at "The Coach and Horses" has been hired on a more permanent basis for three nights per week. Members of the club have enjoyed cleaning and decorating the room to improve its appearance, and much interest has been stimulated. Our thanks go to Mr. and Mrs. Dempsey, for all their assistance with this project.

The Christmas Cabaret and Dance was held at the Arosa Rooms, Richmond Ice Rink. The attendance was good, and everyone agreed that it was a most enjoyable evening. The programme included the competition among the various departments for the best cabaret act. The panel of judges consisted of Mr. and Mrs. J. P. M. Brennan, Dr. and Mrs. C. R. Metcalfe and Mr. and Mrs. L. Pemberton. The first prize—a bottle of sherry—went to the Students' Union for their hilarious sequence portraying five singing beauty queens. The second prize—a Christmas Cake—was awarded to the Herbarium, for the interpretation of "Alice in Wonderland". Also to be remembered were the Alpine and Herbaceous Department—the singing, guitar strumming "Alpine Band".

Finally I would like to thank D. Coleman for all his help and advice as Assistant Social Secretary.

E. SAXON, *Hon. Secretary.*

SPORTS AND SOCIAL CLUB.

The Club has been well supported and now that the Three-Year Course is properly established we hope that it will go from strength to strength. Unfortunately the cricket suffered from lack of support and it is hoped that there are some keen players in the new intake of students. The Athletics Section was very successful and those who took part are to be congratulated.

Socially the year was not a success and the support for the "record hops" was not good. Financially however the Club is very sound owing to the amazing total raised by the football pontoon—a great effort on the part of J. Endall. The Christmas Draw was also a success. One result of the healthy bank balance is that table tennis and cricket equipment has been bought for use by the club. At the moment the club is working on a project for a social centre in the room behind the "Coach and Horses". As an experiment we have rented this for a six-month period.

The election of Officers for the year was as follows: President, Dr. C. R. Metcalfe; Chairman, Dr. K. Jones; Treasurer, R. I. Beyer; General Secretary, E. D. Scarr; The Section Secretaries: Cricket, C. E. B. Gordon; Hockey, G. Graham; Social, E. Saxon; Assistant Social, D. Coleman; Football, D. Coleman; Athletics, B. Penberthy; Music, D. Waddell; Photography, A. Barnes; Table Tennis, R. Ince; Christmas Draw, E. Saxon; and Football Pontoon, A. Keevil. The Departmental Representatives: Herbarium, Miss S. Willsher and M.A.F.F., R. Fender.

The thanks of the club are due to those who have worked to make the year a successful and happy one.

E. D. SCARR, *Hon. Secretary.*

CRICKET SECTION.

The season proved a very disappointing one—eight matches were played resulting in—one win, one tie and six losses. Seven matches were cancelled owing to rain or because it proved impossible to raise a team. It was for the latter reason that the game with the Old Kewites was cancelled.

The one victory was against the John Innes team by five wickets but the most exciting match was against The Grotto whose team included three Old Kewites. We lost to Wisley on two occasions, to Cambridge Botanic Gardens, Oaklands Farm Institute, Richmond Nomads and The Grotto.

The averages for the season were poor. A. Balfour topped the bowling with 13-80 followed by J. Endall 11-100, C. Gordon 10-112, J. Elsley 15-173 and R. Ince 12-143. The batting averages were well down on the previous season—K. Robinson 15-6, C. Gordon 12-2 and J. Elsley 10-8. A. Herron was very successful as a wicket keeper during his first season as a cricketer. In conclusion our thanks are due to all who have given this section their support and assistance.

C. E. B. GORDON, *Hon. Secretary.*
Captain, 1965.

HOCKEY SECTION.

The season 1964/65 came to a satisfactory close with the match results as follows : 6 won, 7 lost, 2 draws with 5 matches having been cancelled. These results were considered to be quite pleasing when account was taken of the fact that many of the new students had played very little hockey before entering Kew.

Eighteen matches have been arranged for the 1965/66 season. The record at present has revealed a weakness in marksmanship but it is hoped that this will improve with the introduction of the three-year course, for the team players will have an extra year's experience and practice.

After the home games we now have use of the Common Room in the Jodrell Laboratory in order to entertain the opposing teams.

G. N. GRAHAM, *Hon. Secretary.*

FOOTBALL SECTION.

The first half of the season was recorded in the 1964 *Journal*, on page 407, as being very successful. In the second half there were fewer games. The six-a-side triangular games with Wisley and "The Grotto" were a success. We won our first four games but with only five players the result was a draw with Wisley in a home match. In all, throughout the season, we won 13 matches and drew one, but none were lost. I wish my successor D. Coleman a very good season.

J. ENDALL, *Hon. Secretary.*

Owing to our superiority in the horticultural world during the season 1964/65 we expected to encounter some very keen opposition. In order to improve our play for the oncoming challenges, we arranged an early match with the Queens Park Rangers Supporters' Club, but we lost miserably. So far this season we have played 6 games—4 lost, 1 drawn and 1 won.

This performance has shattered our "ego" but we are looking forward to a further 12 fixtures and will endeavour to regain the reputation of last season.

D. P. COLEMAN, *Hon. Secretary.*

ATHLETICS SECTION.

KEW-WISLEY ROAD RELAY RACE.

This year the event was held on the 6th March, despite doubts on the 4th when there was a snow fall of three to four inches. Friday and Saturday however were sunny and the running pleasant, although it was a little chilly. The race was started by the Director, Sir George Taylor. The runners jockeyed for good positions and the supporters scrambled into their vehicles.

At the end of the first lap, East Malling were in the lead with Writtle just behind. D. Waddell for Kew came in third. On the second lap through Twickenham, D. Coleman put Kew in the lead

within the first mile and finally opened a gap of 200 yards. Despite a fast third lap by A. Keevil, Writtle challenged from the fourth position and came up to shorten Kew's lead by 150 yards. Through Esher on the fourth lap, Writtle continued in second place, approximately 40 yards behind A. Herron, the Kew runner. The fifth lap, a hilly 2.95 miles was run for Kew by P. Penberthy, who increased the lead to over 200 yards, setting up a record time of 13 mins. 46 secs. In the final lap J. Elsley finished to give Kew a lead of 700 yards, covering the 2.75 miles in 14 mins. 22 secs.

The order of arrival at the finishing line was—Kew 92 mins. 51 secs. (a new record), Writtle 95.44, "The Grotto" 98.47, Wisley 98.59, East Malling 99.19, Swanley 100.20, Pershore 101.05, Oaklands 103.00 and Sittingbourne 103.20.

After tea Wisley put on a variety of films and later a dance was held at Byfleet Village Hall. The Director of Wisley, Mr. F. P. Knight presented the cups—The Pring Challenge Cup for the first team between Kew and Wisley and the Invitation Cup for the winning team. Both went to Kew while each team member also received a silver medal. Bronze medals were presented to the Writtle team, while Maori Batons went to "The Grotto".

D. WADDELL, *Retiring Hon. Secretary.*

CLOG AND APRON RACE.

This was held on the 12th October, when seventeen runners entered. The race was started by the Director, Sir George Taylor. Miss E. Stevens had been given a start which she held to become the first woman to win this event. The first three runners were—Miss E. Stevens (Tropical Department), D. Coleman (Herbaceous and Alpine Department) and J. Endall (Arboretum South).

At the end of the race cider was supplied by Dr. Metcalfe, the first three receiving a bottle each. Mr. R. Fender acted as time-keeper.

(The Broad Walk is 375 yards long).

ROUND THE GARDENS RACE.

This was held on the 19th October with the first woman entrant, Miss E. Taylor, to make a total of nine entrants. The Director started the race which covers a distance of $2\frac{2}{3}$ miles.

Barefooted B. Penberthy took the lead and ran to victory $1\frac{1}{2}$ minutes ahead of A. Heron. The inter-departmental Cup was won by the Herbaceous and Alpine Department with 1st and 3rd places giving 4 points against the North and South Arboretum Departments with 2nd and 4th resulting in 6 points. Mr. R. Fender acted as time-keeper.

SWANLEY SPORTS DAY.

Together with teams from other horticultural establishments Kew accepted an invitation to run at the Kent Horticultural Institutes' Sports Day on 22nd May. We took part in an open 4 x 880

yards relay race on a steeply sloping track. The Kew team out-classed the field completely and won quite easily. The running order and times were : D. Coleman 2 mins. 22 secs., A. Heron 2 mins. 35 secs., B. Penberthy 2 mins. 4 secs., and John Elsley 2 mins. 18 secs. Following this the same team competed as guests in the 4 x $\frac{1}{2}$ lap relay and the results were again decisive. B. Penberthy, J. Elsley and A. Heron then took part in the mile as guests, again securing the first places.

Each member of the team received a cup from Mrs. E. C. Cordell, the wife of the Principal at Swanley, for their part in the 4 x $\frac{1}{2}$ mile relay.

PHOTOGRAPHIC CLUB.

One of the main events, the competition, was held in the new Jodrell Lecture Theatre and this was a great improvement. The standard of projection was better and the comfort of the audience left little to be desired. Coffee and biscuits were served by the "Students' Union" during the interval. A third class was included, this being "Plant Portraits" for the permanent staff.

The Plant Portraits from the students were a little disappointing, only one or two slides being outstanding. A. Smith was placed first with a slide of *Karata plumeri* on Kodak. Second prize was awarded to I. Shephard with *Newboldia laevis* while B. Nash took third place with *Crinum pedunculatum*.

The Plant Portraits submitted by members of the staff were of a higher standard. P. Kinzel took the first and third prizes with *Iris sibirica* and *Jacobinia obtusior* respectively, both on Agfa, while the second place was awarded to Miss G. Dawson with *Drosera spathulata* on Kodak.

The general section was well supported for eighty slides were entered. The first prize was awarded to R. Bowen with a good slide "Ostend Harbour" on Perutz. The second and third prizes went to P. Kinzel for "An old Castle in Scotland" and "View from the Isle of Skye", both on Agfa.

Our thanks go to S. W. Rawlings and F. Ballard for the judging of the slides, and for their comments on the night of the competition.

Concerning other activities, a photographic album has been purchased to provide a record of student activities, i.e. football, hockey, athletics and the various dances that take place during the year. The students' slide collection is slowly increasing as Kewites kindly donate slides to the club.

Our thanks are due to P. Wilson for his help in selling films, etc., on which members get a 5% discount and the club 2%. This small profit has enabled the purchase of book tokens totalling £8 16s. 6d. for prizes in the competition.

A. L. BARNES, *Hon. Secretary.*

LAWN TENNIS CLUB REPORT, 1965.

Mildly encouraging seems the best description of the Club's activities at the end of the 1965 season. "Club Nights" proved more popular than they have been for several years and it is hoped that this trend will continue. Few students took active part, but perhaps more will be able to find the time and interest again in due course.

Both matches against the British Museum (Natural History) for the Nathismus Cup were won, a reversal of the previous season's results not obtained without a number of long and hard-won sets. The Club was particularly happy to welcome back Mr. and Mrs. R. Claiden, who greatly added to the strength of the Kew team. For one reason or another it was not possible to hold the third match against the British Museum nor the other traditional fixtures against the Queen Elizabeth College and the students' match against Wisley.

Dr. R. K. Brummitt won the Men's Proudlock Singles Tournament and retains the cup for the second year running. The ladies' competition was not played.

Mr. G. Yates and Mr. C. Preston ensured that the courts were kept in good condition and marked out throughout the season. These services, which have been acknowledged here for so many years, are appreciated as much as ever. Mr. D. Hunt organized working parties to replace much of the wire-netting surround, with materials generously donated by a member of the Club.

R. M. POLHILL, *Hon. Secretary.*

STUDENTS' UNION REPORT

The year 1965 will be remembered as one in which we gave the Union a face lift. The title of the organisation was changed from Student Gardeners' Association to Students' Union. The responsibility of finding initial accommodation for students has been taken over by L. Pemberton, relieving the Secretary of a particularly arduous task.

The awards for the plant identification tests were as follows:—

October, 1964 to March, 1965—J. Mitchell.

April, 1965 to October, 1965—A. Rich.

The winners were presented with a 30/- book prize.

The summer lecture series proved to be a great success both financially and educationally, drawing in a large number of the Gardens staff. Six lectures were arranged, but one had to be cancelled:—

1. "The Transplanting of Large Trees" by J. Allen (1961) of Landscape Trees.
2. "Plant Breeding" by L. A. Darby. G.C.R.I.
3. "Grass sowing over large areas" by Suttons' Representatives.
4. "Landscape Architecture" by A. Blanc.

5. "The Parks and Recreation Administration Service" by K. L. Morgan, Secretary of Parks Administration.

The affiliation of the Students' Union has been effected with the National Union of Students and thus opened up a new field where problems can be discussed at a higher level and all the advice and help of the N.U.S. is available to every member.

Thanks are due to K. Robinson for his ceaseless efforts to help the Union and also to A. Barnes, who proved a most capable Treasurer. We extend our thanks to the Committee Members and wish the Union every success and good fortune in 1966.

J. E. M. JONES, *Hon. Secretary*,

THE MUSIC CIRCLE

During the past few months there has been a revival of the interest in light classical music. The average attendance has been 13 over the last 10 meetings. This is very encouraging to members and also Dr. and Mrs. Metcalfe who welcome us so readily at their home.

Without the musical knowledge of my predecessor, J. O'Connor, I have responded to requests and have also introduced the more popular composers for our evenings.

Older members will recall the carolling round Kew for Dr. Barnardo's. This was revived, and in collaboration with the Christian Fellowship, 37 Kewites braved a chilly night on December 21st, when we raised £21. We ended up at Dr. and Mrs. Metcalfe's home where we enjoyed a very good spread which they had kindly laid on. Our thanks go to all who supported this evening and also the circle meeting and to Dr. and Mrs. Metcalfe for their wonderful hospitality.

The generosity of our supporters at the meetings was shown when we opened the Dr. Barnardo's house—there was £9 2s. 0½d. from the last 13 months.

D. WADDELL, *Hon. Sec.*

TABLE TENNIS

This was a year of fluctuating fortunes. Our hope of installing the newly purchased table in the Jodrell Common Room was not realised, and it was finally placed in the practice room behind "The Coach and Horses". This room, although ideal in many ways, leaves much to be desired, for the time in which it may be used is limited. During December this room was decorated by members of the Social Club and the Students' Union for the establishment of a social centre. This will allow more time for practice, and thus play will be improved. Practice nights from October, 1965, have been well attended with an average of fifteen players. One event was held during the Autumn against the students at "The Grotto". Kew lost by 7 matches to 2.

Thanks are due to the team captain, H. Boaler, for his hard work and regular appearances on practice nights.

R. INCE, *Hon. Secretary*.

JOHN SMITH KEW'S FIRST CURATOR

John Smith is an undeservedly neglected figure in the history of the Gardens. He worked at Kew when its fortunes were at their lowest ebb, and under Sir William Hooker, held the post of Curator for 23 years.

He was born on 5th October, 1798, in Aberdour, Fifeshire, where his father was gardener to a Mr. Stewart. From an early age he showed an interest in gardening, and consequently on leaving school at 13 entered an apprenticeship to his father, then gardener to Thomas Bruce of Grangemuir. With the aid of Abercrombie's "Universal gardener's kalendar" and Lee's "Introduction to Botany", he gradually acquired a basic knowledge of botany. When his apprenticeship ended in November, 1815, he was engaged as journeyman in the garden of Robert Ferguson of Raith, near Kirkcaldy. Here, for the first time, he saw *Strelitzia, reginae*, succulent euphorbias and cacti. However, as the youngest labourer, there was little opportunity for study, and after a year he obtained a post on the estate of the Earl of Moray, at Donibristle, near Aberdour. In November, 1817, he moved to Caley House, Kirkcudbrightshire, where he was given access to the library which included a set of the "Botanical Magazine". Through his father's acquaintance with William McNab, Curator of the Royal Botanic Garden, Edinburgh, he was taken on there as a journeyman in 1818. McNab, who, incidentally, had worked at Kew from 1801 to 1810, encouraged the young man's interest in botany, and lent him a book on Jussieu's natural system. He was allowed to attend lectures on botany, and in his leisure time studied and collected the local flora. In 1820 he left Edinburgh with a letter of recommendation from McNab to W. T. Aiton, Director of the Royal Gardens. He accepted a vacancy in the Royal Forcing Gardens at Kensington Palace, and two years later was transferred to the propagating department at Kew.



The Botanic Garden at Kew, at that time the private property of the Crown, consisted of about nine acres enclosed by walls. The northern part near the Orangery contained the Arboretum, and the remainder was devoted to the herbaceous collection and hothouses. One of the tasks of the young gardeners, who numbered about ten, was to maintain the furnaces in these hothouses, including the

carting of coal and the removal of ashes. Their wages were 12s. a week.

A small wooden door in the Arboretum wall, near the present Main Entrance, provided public access to the Botanic Garden; the entrance to the Pleasure Grounds, which constituted the bulk of the Gardens, lay a little farther along the same wall. These two entrances were abolished when George IV enclosed the western end of Kew Green, and a new imposing gate was substituted about 1825 in the wall near the Director's Office.

When Smith came to Kew, Robert Begbie was foreman, but the following year, 1823, W. T. Aiton decided to put Begbie in charge of the Arboretum and out-of-doors work, and promoted Smith to foreman of the hothouses and propagation department. It thus became Smith's responsibility to tend the rich collections of new plants being sent home by Allan Cunningham and James Bowie from Brazil, South Africa and New South Wales, by Dr. Wallich from India, and David Lockhart from Trinidad. Smith undertook some re-organization of the Gardens in his charge. He records that in 1825, "I began to take special interest in . . . [the Aroids] and found them like the ferns, dispersed in the different hot-houses. I brought them together, forming a group of them at the west end of the hot-house".⁽¹⁾

In 1826 Smith was offered a more lucrative post in Scotland, but W. T. Aiton, being reluctant to lose such a capable employee, consented to the following conditions that Smith proposed: "First, that a certain house conveniently situate to the Garden is to be put in order for me to live in; if it cannot be done, some other house is to be found for me as conveniently situate. And in the second place, my wages is [*sic*] to be at the rate of thirty-one shillings per week, from May last till first May, 1827, when at that date I am to receive at the rate of thirty-four shillings weekly . . ." ⁽²⁾ This agreement was made on 9th September, and Smith with typical Scots caution added that "this engagement had been wrote [*sic*] on paper and signed by Mr. Aiton and me so that no misunderstanding may happen."

About this time Aiton was employed almost exclusively on improvements to the grounds of the Royal Lodge, Windsor Park, and the burden of the routine management of Kew fell upon Smith. He obtained Aiton's permission to re-arrange and name the grass collection, having taken a special interest in grasses since his early days at Edinburgh. "Mr. Aiton was at first adverse to this being done, but ultimately he consented on the understanding that I should be responsible for the correctness of the names, which I readily agreed to. The first consideration as to what kind of labels should be used so as to admit of the specific name, with the initials of the genus before it . . . led to the adoption of labels in the form of the letter T . . . Two sizes were made, one with a broad head for the genus and the other narrow to contain the name of the species. They were made of cast iron, painted white, with the letters in black, and they have since served as the model for all out-

of-door labels ; indeed, the original labels made for the grass collection were still in use in 1864."⁽³⁾ Similar cast iron labels of a smaller size were used for naming the succulents and other greenhouse plants.

George IV died in 1830, and his brother, who became William IV, made a number of changes at Kew. The authority of W. T. Aiton, who, under George IV, had been in charge of all the royal gardens, was restricted to Kew Gardens. This would seem to have been a spiteful retaliation for some offence that Aiton had committed when William IV was Duke of Clarence. The King also restored that portion of Kew Green, which had been enclosed by George IV, to the local parish, and removed the road which ran through the centre of the Green. The northern sector of the Gardens was opened up by demolishing a number of boundary walls. William IV also approved a plan for a new palm house, prepared by Sir Jeffrey Wyattville, and in 1834, a site was actually chosen in his presence, but no further progress was made. Two years later the Aroid house was transferred from Buckingham Palace to Kew. "Much difficulty, however, arose in choosing a site for it, and site after site was marked out for the King's approval, but he would not sanction any of them on account of trees to be cut down. He, therefore, took upon himself to find a place for it and, accordingly fixed, upon the site where the Conservatory No. 1 . . . now stands."⁽⁴⁾

Adequate financial aid and extra staff were not forthcoming from the Lord Steward's Department, and neglect was becoming everywhere apparent. Sir William Hooker, later recalling this period, believed that the state of the Gardens would have been even worse "but for the truly parental affection cherished towards it by Mr. Aiton, and the able exertions of his foreman . . . Mr. Smith." The frequent criticisms of Kew in the horticultural and scientific press compelled the Treasury to appoint an investigating Commission in January, 1838. Referring to the formation of this Commission, which comprised Dr. Lindley, Joseph Paxton and a Mr. Wilson,* J. C. Loudon declared : "Whatever changes may take place, we trust the merits of that modest and unassuming man and thoroughly scientific botanist and gardener, Mr. Smith, will not be forgotten. If Mr. Aiton resigns, which, we trust, he has too much spirit and good sense to do (he having, as we learn, been found altogether blameless), Mr. Smith is, we think, the fittest man in England for the Kew Botanic Garden."⁽⁵⁾

Smith was now the principal foreman with James Templeton as foreman of the Arboretum ; there was a permanent staff of ten labourers with three extra men for the summer months. The Botanic Garden had grown to some 11 acres with 12 greenhouses and the Orangery. The Commission considered the plants in the houses to be reasonably healthy although excessively crowded. They noticed that "a great many plants have been newly labelled, with

* Wilson was gardener to the Earl of Surrey.

their names written on painted sticks, especially in the houses Nos. 2, 5 and 10, but that the principal part of the collection is otherwise unnamed. . . . So far as the mere cultivation of this place is a subject of observation, it is due to those who have charge of it to say, that it does them credit, considering the crowded state of the houses and the inadequate funds allowed for its support. . . . It is impossible to speak of the general management in similar terms . . . ; no kind of arrangement has been observed ; no attempt has been made till lately, to name the multitude of rare plants it comprehends . . . ; no communication is maintained with the Colonies. It is admitted that there is no classification observed in the Garden. What names are to be found in the Garden have been furnished by Mr. Smith, the foreman, and the Director [W. T. Aiton] does not hold himself answerable for them. . . . This most important duty is thrust upon a foreman, paid small weekly wages for cultivating plants, who, whatever his zeal and assiduity may be (and in this case they have been such as to deserve the greatest praise), has no sufficient means of executing such an office."⁽⁶⁾

John Smith denied the accuracy of certain sections of the Commission's Report. "It will be seen by the date of the above Report that the examination of the Garden took place in the month of February, 1838, just after one of the severest winters on record, and heaps of melted snow still lying on the ground, and all evergreen shrubs presenting a sorrowful aspect, and, as the time occupied in examining the Garden, hothouses, collections, and books was only a few hours, such being the case, it could not otherwise be expected that some inaccuracies were the result, and unfavourable impressions formed. For instance, as regards the herbaceous ground, if it had been examined in summer, and time taken, it would have been found to consist of about 2,500 species of perennial plants, arranged according to the Linnaean system, in single rows, with a path between each two, and each genus having its name printed on a large iron label. Besides the grass collection being named as stated in the Report, it would also have been found that the large collection of succulents and other conspicuous plants had their names printed on iron labels."⁽⁷⁾ He also refuted the charge that there had been no adequate communication with the Colonies.

The conclusion reached by the Commission was that if Kew "is relinquished by the Lord Steward, it should either be at once taken for public purposes, gradually made worthy of the country, and converted into a powerful means of promoting national science, or it should be abandoned. It is little better than a waste of money to maintain it in its present state, if it fulfils no intelligible purpose, except that of sheltering a large quantity of rare and valuable plants."⁽⁸⁾

While the future of the Gardens remained uncertain, John Smith was naturally very concerned about his own position. On 5th March, 1838, he wrote to Sir William Hooker at Glasgow University explaining that "Mr. Aiton has not resigned yet, his

anxious wish before he does so is to see me made right, but they have not communicated with him on any subject, therefore I am rather afraid that appointments will be made without them knowing that there is such a person as me. All my years of service never gave me an opportunity of becoming acquainted with official personages, and I am advised to get my friends without delay to speak or write to the Commissioners in my behalf; and I flatter myself that if my humble abilities and years of servitude were fairly made known to them I think I might have no reason to fear another stepping in before me unless it was by some great favouritism. At present, the Commissioners know nothing of me. My botanical friends about London will do what they can for me, and I am sure if you would take the liberty to write them to state what my abilities as a botanist and cultivator are it would weigh greatly in my favour."⁽⁹⁾ He had already solicited the help of Robert Brown at the British Museum (Natural History) in a letter of 14th February, 1838. "Mr. Aiton tells me and goes so far as to say that if you can do me any good by speaking for me, that you are not to hinder yourself from doing so out of any delicacy to him, and I am sure a word from you will tell greatly to my advantage at this present time, and I believe no time must be lost . . ."⁽¹⁰⁾ Loudon continued to champion Smith in public. "It does not appear to be known at Kew what the intention of government is respecting these gardens, but we do hope that, whatever changes may take place, justice may be done to Mr. Smith, whose modest merit is acknowledged, by every botanist and gardener, to be beyond all praise. If Mr. Aiton should resign, and any other person be appointed to fill his place except Mr. Smith, an act of injustice, and still more of impolicy, will be performed, which it is revolting to the mind to think of. With respect to describing the new plants, Mr. Smith has proved himself, in Hooker and Bauer's 'Genera Filicum', now publishing, as competent to do that as any botanist whatever; but it does not appear to us that government need trouble itself about describing plants at all; it has only to leave the collection open to the examination of all botanists, and provide a clerk for carrying on, under the direction of Mr. Smith, a correspondence with the public botanic gardens, British and Continental."⁽¹¹⁾

At long last the Government acted, and on 31st March, 1840, transferred the Gardens from the Office of the Lord Steward to the Commissioners of Woods and Forests. On 1st April, the following year, Sir William Jackson Hooker, Professor of Botany at Glasgow University was appointed Director of the Botanic Garden, but W. T. Aiton still retained control of the Pleasure Grounds. In the Autumn of 1841 John Smith was officially appointed Curator at an annual salary of £130 plus a house.

Sir William Hooker was no stranger to Smith who had first met him back in 1832. "My first introduction to Dr., afterwards Sir, W. Hooker, was when I was introduced by Mr. Murray, Curator of the Glasgow Botanic Garden, who had informed me that the Curatorship of the Manchester Garden was then vacant,

and he thought that if I put myself forward, I should become a candidate, and he introduced me to Dr. Hooker, and mentioning the circumstance, he said: 'Oh, I will give him a certificate,' and immediately began to write. I was taken by surprise, and as I knew nothing of the nature of the position, and had an engagement with Mr. Aiton I thought it proper to say, 'I am much obliged to you, but as I have an engagement with Mr. Aiton I can take no steps in the matter till I have consulted with him.' He said 'Quite right,' and drew the pen through what he had written. As he knew nothing of me before this, the circumstances led me to think him a hasty but well-meaning gentleman."⁽¹²⁾ Shortly following this brief encounter Smith entered into a correspondence with Sir William Hooker concerning their mutual interest in ferns.

One of the principal recommendations of the Lindley Commission proposed that the Gardens "should be enlarged by the increase of at least 30 acres from the pleasure grounds of Kew." This Sir William Hooker achieved in 1843 by the transfer of 45 acres; two years later, on the retirement of W. T. Aiton, he acquired the remainder of the Pleasure Grounds and the Old Deer Park. Having extended the Gardens, Sir William now desperately needed more glasshouses. The desirability of a new palm house was again raised and, according to Smith, "Sir Jeffrey Wyattville's plan and the site having been approved by Sir William Hooker, it was submitted to the Commissioners of Woods and Forests for their approval and grant for its erection. It was estimated to cost £10,000. The Commissioners, however, thought proper to place the matter in the hands of a different architect, and Decimus Burton was chosen who, as might be expected, set aside Sir Jeffrey Wyattville's plan and site, and submitted a plan of his own, which being approved by the Commissioners, he was instructed to choose a site for it in the new Ground. On his coming to Kew, he had not been more than half an hour in the Grounds when he fixed upon the site where it now stands. Being present, I thought it my duty to say it would never do here, for where we now stand is a bog the greater part of the year, and water was always to be found within a few feet of the surface. He said, 'Oh, we will make that all right.' I may here mention that my objection to this site was that it was the lowest ground in the Parish of Kew, and consisted originally of lagoons and swamps connected with the Thames. George III took advantage of these lagoons and converted them into a lake which, after the King's illness and removal to Windsor, was neglected, and in 1812 filled up, the only part left being now ornamental water lying between the Palm House and Museum. . . . On the 4th April [1844] Mr. Burton sent his assistant to make the exact site, as regards length and width of the house; this being my last opportunity, I strongly protested against its position."⁽¹³⁾ Smith was subsequently reprimanded by Sir William for interfering in a matter outside his jurisdiction. Smith's defence was his fear of the probable flooding of the furnaces below the Palm House. (This actually occurred and proved troublesome to rectify.) Asked

where he would put the Palm House Smith "accordingly made a plan showing a grand walk extending from the Orangery to the Pagoda, the tropical house, that is the Palm House, on one side, and a temperate house, expected to be erected at some future time, on the other side, the site being on the high ground including the part marked out for the Palm House in King William's reign. . . . Shortly after this Sir W. Hooker requested me to accompany him to Mr. Burton's office in London for the purpose of seeing the design and plans of the intended new Palm House. The plan consisted of a curvilinear structure similar to the Duke of Devonshire's house at Chatsworth, the profile having an imposing appearance, with which Sir W. Hooker was much pleased. I, however, was more concerned about the interior, and, on examination, I found that there were so many pillars and they were so close together that there would not be room for the full expansion of the leaves of the large palms. On my calling attention to this, Sir W. Hooker was of the same opinion, and on calling Mr. Burton's attention to it he said he would try another way. With this our interview ended. About this time Mr. Richard Turner of the Hammer-smith Iron Works, Dublin, having heard of the intended erection of a large hothouse at Kew, came over to see about it, and having obtained an introduction to the Commissioners of Works they requested him to furnish a plan and estimate for an iron structure in conjunction with Mr. Burton, which he obligingly did. On his informing me of this, I said, 'I hope you will not have so many pillars in the centre as in Mr. Burton's plan.' 'Oh, no, he said, and took a piece of paper, and drew a pen and ink profile of the Palm House as it was to be erected, being quite different from Mr. Burton's plan, having no pillars in the centre.'⁽¹⁴⁾ This claim that Turner was the real designer of the Palm House is supported by a letter from T. Drew in the "Building News" for 19th March, 1880. According to Mr. Drew, Richard Turner was allowed at his own risk and expense to submit a full size portion of the structure, which was tested and approved in the yard of Messrs. Grissel and Peto. Indeed, the Palm house has the functional simplicity one would expect from an engineer. Decimus Burton's conception of a glasshouse is demonstrated in the heavy and ornate Temperate House.

When John Smith arrived at Kew in 1822 there were no books provided for the instruction of the gardeners, who learnt their craft entirely by practical experience and observation. "As for elementary books on gardening and botany they had none. I, on first coming to Kew, was considered wonderful on account of possessing three books, viz. Maw's 'Gardeners' Calendar', Lee's 'Introduction to Botany', and Smith's 'Compendium Florae Britannica'".⁽¹⁵⁾ Soon after Sir William Hooker's appointment in 1841, a library was established for the use of the young gardeners. This was later supported by a regular series of lectures, and the student gardeners were encouraged to sit simple examinations. In 1850 John Smith "tried a direct test by offering as a prize a copy of Hooker's

'British Flora' for the best collection of dried British plants collected in the neighbourhood. . . . Four collections were put in for competition. . . . The prize was awarded to Charles Baxter, the afterwards indefatigable but unfortunate African collector."⁽¹⁶⁾ W. Botting Hemsley, who knew Smith, said that "he encouraged by word and deed such young men as were really industrious and persevering".⁽¹⁷⁾

In 1847 Sir William Hooker created the nucleus of a museum of economic botany in the old fruit store which stood in the former Royal Kitchen Garden. He contributed specimens from his own collection which he had used in his lectures at Glasgow University. Smith also added pine cones, capsular fruits and samples of wood. His son, Alexander Smith, then 14 years old, was allowed to arrange these specimens, and in June, 1847, was officially engaged to look after the collection. In 1856 he became Curator of the Museum, and accompanied Sir William to the Paris Exhibition to select and purchase new material. The following year found him busy organizing the new museum facing the Pond, but, unfortunately, a severe illness compelled him to resign in 1858. After a long convalescence he was re-instated in May, 1864, as a clerk in the Herbarium, but his ill-health persisted and he died on 16th May, 1865, at the age of 33 years. He had obviously inherited his father's capacity for hard, sustained work; during his short life he was a contributor to the "Journal of Botany", Moore and Lindley's "Treasury of Botany", and Markham's "Travels in Peru and India," and on his death left 30 volumes of notes on economic botany.

In 1855 Dr. (afterwards Sir) Joseph Dalton Hooker was made Assistant Director to his father. John Smith strongly objected to what he considered was Dr. Hooker's interference in horticultural matters, about which he thought Dr. Hooker knew very little. This resentment probably distorted his recollections of events after that date. Smith claimed that the former policy of conserving plants then "began to waver, and in time changed to a destructive policy, the first act of which was to cut down the climbers which occupied the whole of the staircase pillars and gallery rails, thus leaving the iron work as bare as it was left by the Architects. . . . Sir William and Dr. Hooker took it into their heads to destroy many old specimen plants, which since their accommodation in the Palm House, had become the pride of the house, for which no reason was given, and it appeared to me nothing but wanton mischief. These destructions took place at three different times. . . . The mode of proceeding was, Sir W. Hooker would fix his eye on a plant, ask its history, then say, 'Away with it.' And in a moment the foreman's big knife made the bark hang in ribbons. This was the signal for the men to break it up, and convey it, and the box in which it was grown to the rubbish yard, Plant after plant followed by the same way with apparently as much indifference as if they had been common laurels."⁽¹⁸⁾

On distressing occasions like these Smith probably sought consolation in the study of ferns, his constant interest since 1823, when he was put in charge of them at Kew. The collection then comprised about 40 hardy species, British and foreign, and about the same number of tender exotics. New species were added, many from spores obtained from collections of dried specimens. By 1845 the collection had increased to some 400 species and was described by Smith in the "Botanical Magazine" (1846). This was the first publication of any list of plants at Kew since the second edition of Aiton's "Hortus Kewensis" in 1813. In 1829 Smith established the nucleus of his personal fern herbarium with a collection of Indian ferns presented by Dr. Wallich. To these was added Robert Heward's Jamaican ferns, and in 1841 the ferns collected in the Philippines by Hugh Cuming. On a visit to Kew in 1836 Sir William Hooker saw the aged Francis Bauer engaged on illustrating the fructification of ferns. Impressed with the drawings, he conceived the idea of publishing them, and urged Bauer to continue. Smith, afterwards learning of their proposed publication, wrote to Sir William. "Mr. Bauer tells me that you will be glad to receive any note which I may have to say upon them. I, accordingly, send you part of what I have done, which will show you my manner of arranging the genera, which I did last winter merely to assist me in arranging my specimens, as I was not pleased with any arrangement I had seen. But I have not had the opportunity of consulting many books; on that account, it is not so perfect as I could yet desire."⁽¹⁹⁾ This was the first of an exchange of letters between Smith and Hooker from which one learns that Smith was largely responsible for selecting the material for Bauer to draw. The drawings were published in parts during 1838 to 1842 under the title of "Genera Filicum", and to it Smith contributed descriptions of 20 new genera. In 1840 he presented a paper to the Linnean Society outlining a new classification of ferns. It was subsequently published in instalments in "Hooker's Journal of Botany", 1841 to 1843, as "An Arrangement and definition of the genera of ferns." According to J. G. Baker, "his primary divisions, *Dermobrya* and *Eremobrya*, were original, but in his idea of founding genera on venation, he was anticipated by Presl, whose 'Tentamen Pteridographia' appeared in 1836."⁽²⁰⁾ He named Schomburgk's ferns of British Guiana, published in "Hooker's Journal of Botany" (1842), and assisted J. D. Hooker in the identification of the ferns in his 'Flora Novae Zelandiae' (1855). He also enumerated the ferns collected during the voyage of 'H.M.S. Herald' in Seemann's "Botany of 'H.M.S. Herald'" (1852-7). In 1857 he produced a revised list of the fern collection at Kew, then considered one of the finest in cultivation. Sir William Hooker in the preface to his "Synopsis Filicum", acknowledged that the formation of the fernery was "mainly due to the exertions and ability of Mr. John Smith."

For some years Smith had been troubled by failing eyesight, which eventually compelled him to resign the Curatorship of the

Royal Botanic Gardens in May, 1864, after 42 years' service. Although now totally blind, he continued to write with the assistance of a young woman secretary. In 1866 another catalogue of the ferns in the Kew collection appeared: "Ferns, British and Foreign." It described 164 genera and enumerated 1,084 species. His last work on ferns, "Historia Filicum," was published in 1875. In his day Smith's renown as a pteridologist was overshadowed by the greater reputation of Sir William Hooker. Copeland thought that "Smith knew his ferns as living things . . . and his judgments were entitled to a respect they have never received."⁽²¹⁾ At last there is some slight recognition of his abilities. "His work was overlooked for many years but it is now generally admitted that his ideas were sound and that he was really a pioneer of modern pteridology."⁽²²⁾

In August, 1865, Smith circulated a printed brochure announcing the sale of his herbarium. He described it as containing about 5,000 species of flowering plants, of which more than 3,000 had been in cultivation at Kew during 1824 to 1844. His most valuable collection, however, was his fern herbarium of approximately 2,000 species, which was bought by the British Museum (Natural History) in 1866. The opportunity for its purchase was first given to Kew, but declined because of the difference in the sizes of mounting paper used by Smith and Kew. The British Museum also acquired at least part of his collection of phanerogams.⁽²³⁾

"Domestic botany" emerged in 1871 as a result of sifting Alexander Smith's vast accumulation of manuscript notes on economic botany. Six years later, "Bible plants, their history" appeared, and relying on his retentive memory of long years at Kew, he published, "Record of the Royal Botanic Gardens, Kew," in 1880. This valuable account of the Gardens during the first half of the nineteenth century, like his unpublished history of Kew, contains a number of tendentious statements. Yet another work, "Dictionary of popular names of economic plants", came out in 1882. On the 12th February, 1888, in his 90th year, he died and was buried in the south-east corner of St. Anne's churchyard on Kew Green, beside his wife and six children.

John Smith was completely dedicated to his chosen profession, but his inclinations lay rather with botany than gardening. His competence as a botanist received some public acknowledgment. In 1837 he was elected an Associate of the Linnean Society; in 1853 he was chosen a Member of the Cesareae Leopoldina-Carolinae Academiae Naturae Curiosum, adopting the academical name of the late celebrated pteridologist, 'Kunze'; and he became a Corresponding Member of the Société Cryptogamologique Italienne in 1878. At Kew, where he was known as 'Old Jock', respect rather than affection was his due. J. W. Thomson, another Kewite, declared that he "was an uncompromising stickler for the rules, which accounted, perhaps, for his unpopularity."⁽²⁴⁾ W. Botting Hemsley, on his first arrival at Kew in September, 1860, remembered finding "Mr. Smith, or 'Old Jock' as he was generally

called, seated in a small dark room, with a shade over his eyes, for already the premonitory symptoms were upon him of the perpetual darkness which soon followed. He questioned me as to what I could do in short, jerky sentences, and with an accent quite new to me; and he was evidently amused at my botanical aspirations. Nevertheless, he was exceedingly kind, though rather abrupt in his manner."⁽²⁵⁾ Botting Hemsley, however, confessed that John Smith "was not of a sympathetic nature" since "he required no relaxation himself . . . and gauged other people's wants by his own."⁽²⁶⁾ Despite the defects of his personality, John Smith was not a mean or petty man. He served Kew well during its critical and formative years, and it is hoped that this brief appreciation will help to establish him in his rightful position in the history of the Gardens.

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OPENING OF LIVERPOOL BOTANIC GARDEN
18th SEPTEMBER, 1964.

Address by Sir George Taylor, Director of Kew.

MY LORD MAYOR, ALDERMEN, COUNCILLORS,
LADIES AND GENTLEMEN,

It was with particular pleasure that I accepted the invitation to come to Liverpool to-day, because for many years I have watched with admiration the progress of botanical and horticultural affairs in this remarkable city. There are few Municipalities with so proud and honourable a record in the pursuit of knowledge of plants which will grow within their boundaries. I am, in this context, deeply sensible of the honour you do me in inviting me here on an occasion which is a major landmark in the history of botany and horticulture in Liverpool.

This is not, however, the only reason for my personal pleasure on this occasion. As Director of Kew, I take particular pride in the fact that Mr. Conn, the Director of your Parks and Gardens Department, was trained at Kew and is what those who work at Kew term "An Old Kewite", and he is now President-elect of the Kew Guild. As one "Kewite" to another, I congratulate him on the example he has shown to those young men from the Liverpool Parks Department who come down, with great regularity, for training on our student gardeners course at Kew. I am sure that to-day he is seeing the realization of his botanical and horticultural ambitions and is a very proud and happy man. He will, I am certain, not mind in the least if, by virtue of Kew association, I claim a share in his pride at the achievement now before us.

There is another reason also for personal pleasure on this occasion. I have had much to do in my time with the organisation of plant-collecting expeditions and with the distribution of collections resulting from them. I have been very greatly impressed by the enlightened attitude of your city in supporting these expeditions, such as those of my friend, the late Frank Kingdon-Ward, who made an outstanding contribution to the store of fine garden plants which will grow in these Islands. Plant-collecting expeditions cannot take place without backing. The City of Liverpool may well take great pride in the fact that it gave such support to expeditions which have permanently enriched our British gardens including this one.

There is yet another reason for my personal satisfaction at being here today. As a member of the Council of the Royal Horticultural Society, and I am sure Mr. Gilmour another member present will agree with me, it has given me great pleasure to see the admirable display which, from time to time, the Parks and Gardens Department has put up at the Society's Shows. You have your own great Shows in Lancashire but you are not content with this. You come down to London and beat all-comers on what is for many their home ground! The City of Liverpool displays have reflected great

credit upon Mr. Conn and his men and it is, indeed, most inspiring to see a great city like Liverpool lend its resources to give support and encouragement to the practice of ornamental horticulture. The Gold Medal Exhibit of Orchids and Stove Plants at Chelsea in 1962, lives in everybody's memory. I look forward with confidence to even more interesting displays in the future with the new resources now becoming available. I am sure my expectations will be more than fulfilled.

Let me turn now to say something about past history. In my opening remarks I commented that there are few cities that have so broad and honourable a botanical record as Liverpool. The interest of your citizens in botany does, indeed, go back a very long way—almost to the days of the eighteenth century when much money was coming into the Port of Liverpool from occupations—slaving and privateering—not now regarded as meritorious ventures. But it is an ill wind which blows nobody any good. From this influx of wealth, greatly augmented later, I am glad to say, by more respectable mercantile activities, flowed the cultural enthusiasm which long ago put Liverpool in the forefront in the Arts. Your first Philharmonic Hall was built more than 100 years ago; Liverpool opened in 1852 one of the first municipal libraries in the country; and in 1877 the Art Gallery, now housing your magnificent and renowned collection of pictures, was built. The interest in botany, however was earlier than any of these, the first Botanic Garden being opened as long ago as 1802.

The first Garden profited a great deal from the sea-going interests of most of the members of the Botanic Committee which ran it, and five years after it was founded, there were over a thousand varieties of plants, trees, and shrubs, growing outside in the Garden, and nearly half as many in the Glasshouse. Many had been brought in as plants by owners and masters of ships, or grown from seed supplied in this way. The Garden owed much to William Roscoe (Commemorated in the genus *Roscoea*) who was the leading member of the Botanic Committee, and to John Shepherd, the first Curator of the Garden. These are citizens of whom Liverpool may well be proud.

The tide of urban building soon overflowed the Botanic Garden land. Unlike Kew, it did not remain an island in the midst of a sea of bricks, but was abandoned in 1836 in favour of another site in the Edge Hill district. This second Botanic Garden continued to flourish until early in the present century when the combined influence of a neighbouring marshalling yard and gas works became too much for the plants and it began to decline. When the Nazi's smashed all the glasshouses, it virtually ceased to exist. Now a new Botanic Garden, the third, has been established here at Harthill and Calderstones Park, and a new and, I am sure, glorious era for botany in Liverpool, is about to open.

I have been told that progress in establishing the new Botanic Garden has been somewhat slow and that it has been necessary to erect the glasshouse section piecemeal over a number of years.

I am indeed astonished that it has been possible for the city to find money to do it all, faced as it is with a colossal rebuilding exercise including the vital task of replacing many thousands of sub-standard houses. Although it has put first things first, Liverpool is clearly managing to follow up very closely with second things—a most satisfactory state of affairs for which the city deserves all praise.

For the new glasshouse centre itself, the object of our attendance here to-day, I have nothing but admiration. Here, in this acre-and-a-half of modern glass, it will be possible to assemble and grow almost anything that will survive under glass in the British Isles. On one side of the spacious Corridor are the propagating houses, including the latest aids of mist-spray, soil warming, etc., and on the other side the most attractively laid out display houses, while at the end is the service building which accommodates the necessary facilities for potting and soil preparation. One could not devise a more compact, economical and efficient layout. In these days when staff are difficult to get, I am sure this will pay handsome dividends.

If there is one feature which deserves special mention, it is the Sun Lounge. I have been particularly impressed with the positioning of this amenity. It is indeed a brilliant stroke of planning. Those who look out from it over Calderstones Park, will be amazed to find that their view does not include a single building. Considering Calderstones Park is several miles inside the boundaries of an intensely industrialised city, I find this quite incredible! How fortunate, too, is Liverpool to have a Director of Parks of the calibre of Mr. Conn—one capable to plan and design this truly magnificent range and also with progressive ideas for future developments.

Finally, let me introduce a lighter note. Liverpool has produced, among other phenomena, the “Mersey Sound” and “The Beatles”. I have no comment to make on the “Mersey Sound”—it does not need my voice to augment it! I hope, however, the insect counterparts of the young gentlemen who form “The Beatles” do not take a leaf out of their book. It would be disastrous if they invaded the new glasshouse range as the Group have invaded the world of “Pop” music! I have no doubt, however, that Mr. Conn and his men would soon create a record of their own if there was any sign of this happening—although I doubt whether it would get into the “Top Ten”!

Looking (more seriously) to the future, I predict that the new Liverpool Botanic Garden will soon occupy an even higher place not only in the affections of the citizens of Liverpool, but in the world of Botanic Gardens generally. It will become a “Must” for those interested in plants who have occasion to come to the city, but I am certain that it will also, by its general attraction, appeal to and draw many other visitors. Those who have been responsible for the imaginative conception now being realised in actuality, will be remembered with gratitude by all who come after

them, and it is a worthy crowning achievement to Mr. Conn's long association with the enlightened city fathers of Liverpool.

With this thought . . . My Lord Mayor . . . Ladies and Gentlemen, I have much pleasure in performing the pleasant task for which you have invited me here to-day. I therefore declare the new range of Botanic Glasshouses open.

One Hundred Years Ago.

Sir William Jackson Hooker, LL.D.(Glasgow), D.C.L.(Oxon), F.R.S., Director of the Royal Botanic Gardens, Kew, from 1st April, 1841, died on 12th August, 1865, aged 80, after a very short illness "of a complaint in the throat (septic throat) then epidemic at Kew". His funeral in Kew Church on 17th August, was attended by members of his family and relatives, the staff of the Gardens, and by George Bentham and only a very few friends, the "day and place of his funeral not being generally known and almost everyone being absent from town" (G. Bentham). His son, Joseph Dalton Hooker, was too ill to attend the funeral on account of a recurrence of rheumatic fever.

George Bentham and J. D. Hooker spent the first three weeks of July together enjoying long tiring walks, and admiring the scenery and plants of High Force, Teesdale, Co. Durham. Bentham had just completed the manuscript of the *Myrtaceae* for the "*Genera Plantarum*" which was published in October, 1865.

Ascent of the Matterhorn by Edward Whymper. The first ascent of the Matterhorn was made by Whymper on 14th July, 1865. The Kew Herbarium contains a specimen of *Veronica Alpina* L. collected by Whymper during one of his attempts at 11,500—13,000 ft. in 1862. He also made collections for Kew and the Natural History Museum, in the Andes.

THE KEW GUILD ANNUAL DINNER

will be held on

Wednesday, 25th May, 1966

at

THE CHATHAM RESTAURANT, Victoria Station, London, S.W.1

6.15 p.m. for 7 p.m.

Dress Optional

Tickets 30/- each from the Hon. Treasurer.

THE ANNUAL GENERAL MEETING AND TEA

will be held on

Saturday, 27th August, 1966

At KEW (entrance at Melon Yard Gate)

MEETING to commence at approximately 2.45 p.m.

TEA at approximately 4.15 p.m.

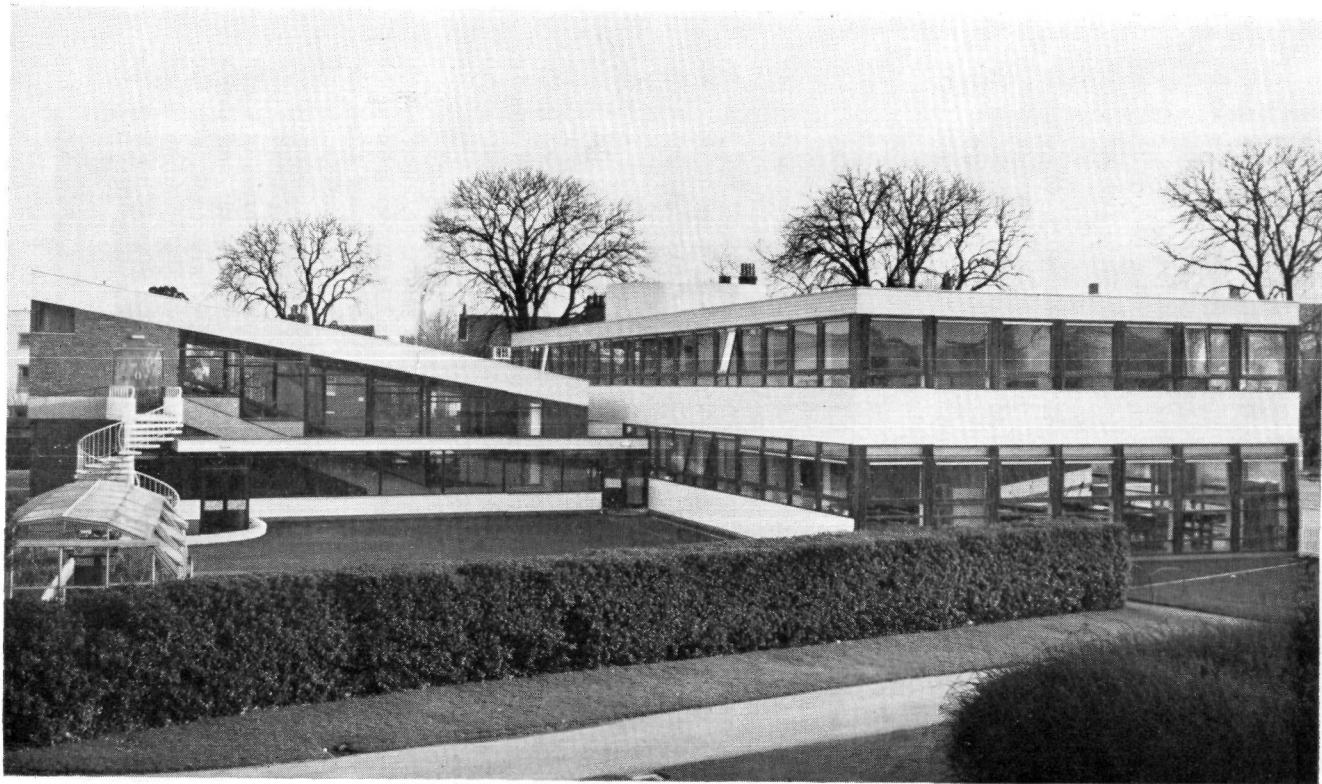
Notification will be made by post well before the event

OPENING OF THE NEW JODRELL LABORATORY

When writing about the new Jodrell Laboratory in the *Journal* of the Kew Guild for 1964, I expressed the hope that a more complete description of the building and of the work that is to be undertaken in it would be published after the official opening. As there have been numerous requests for articles on this subject, I have, in the following account made free use of one that has already appeared in *Nature* and I am indebted to the Editor of that journal for permission to do so.

The new, well lighted, two-storey laboratory of contemporary design was built at a cost of £126,000. A new entrance into the Gardens, known as the Jodrell Gate, gives access to the building from the Kew Road, opposite Gloucester Court. The front door of the laboratory, facing the Herbaceous Ground from the northern end, leads into a large entrance hall. On the ground floor there are also a reception office, a cloakroom, a small reference library, a common room and two rooms where the student gardeners do their practical laboratory work. The common room is available for the student gardeners in the evenings and for the staff during the day. On the first floor there is a series of large and small research rooms which, besides accommodating the staff, will enable us to provide a limited amount of working space for visiting research workers who are either willing to take part in our own programme or who are engaged on their own investigations along similar lines. The research work is undertaken in three departments dealing respectively with (i) morphology and anatomy, (ii) cytology and (iii) physiology. The entrance hall of the laboratory also leads to an air-conditioned lecture theatre with comfortable tip-up seats capable of taking audiences of up to 200. Here we find good facilities for staging demonstrations and for the projection of lantern slides and cinematograph films, whilst a voice amplification system makes it inexcusable for lecturers to remain inaudible. Venetian blinds, black-out blinds and the lighting can be controlled from a panel concealed in a drawer in the lecture bench, or, alternatively this responsibility can be handed over to the lantern operator in the projection room. There is an emergency escape route from the back of the theatre which makes use of a spiral staircase which also serves as an architectural feature of the building. Beneath the raised floor at the back of the theatre there are, (i) a small workshop; (ii) a large room which is used for growth cabinets in which plants can be cultivated in a controlled environment; and (iii) a small laboratory for use by the physiologists who look after the growth cabinets. The equipment throughout the building is all modern, and much time and thought have been devoted to selecting apparatus and fittings that are suitable for the work that is to be undertaken.

It was a great day in the history of Kew when, on May 7th, 1965, the building was officially opened by Lord Florey, President of the Royal Society of London. The ceremony was attended by the Minister of Agriculture and other distinguished guests.



NEW JODRELL LABORATORY FROM WEST.

Lecture theatre to left; ground floor accommodation for students and first floor research rooms to right.

(We are very grateful to Dr. Metcalfe for supplying this block.)

Turning now to the purposes for which the laboratory will be used, we must remember that although many kinds of work are undertaken at Kew, the foremost importance of the institution is as a centre for plant classification. Furthermore, there are more species of living plants in cultivation at Kew than elsewhere and these have been assembled from many different parts of the world. Bearing these facts in mind we must go on to recall that plant classification, while still based primarily on the external characters of plants, which are the special concern of herbarium workers, has now reached a stage at which ancillary investigations relating to the histology and cytology of the plants concerned are recognized as being of great importance in the future development of taxonomy. Indeed, we are now also approaching an era in which a knowledge of the chemistry of plants (chemotaxonomy) seems destined to assume a more important taxonomic role.

For some years the anatomists at Kew have been engaged in producing a series of reference books on systematic anatomy, volumes which are now widely used throughout the botanical world. It must clearly be a first duty to continue this work. But this fundamental work on systematic anatomy must be supplemented by further, more detailed, histological work and by parallel studies concerning the cytology of plants in relation to their classification. Karyological investigations not only produce additional taxonomic characters, but also deepen our knowledge of breeding mechanisms and so help us to understand the interrelationships of closely related species and to lay bare the probable course of their immediate past evolution. Besides all this, the successful cultivation of so many living species from so many diverse localities within the 300 acres of Kew poses many physiological problems that are scarcely likely to come to the notice of physiologists at other centres in Britain. Seeds are sometimes hard to germinate, cuttings are difficult to strike, other species can be kept alive successfully but will not flower, and there are the still more difficult problems presented by species which cannot at present be maintained in cultivation at all. With the passage of time the old Jodrell Laboratory became inadequate to enable us to deal with all these subjects, and the accommodation and equipment were insufficient.

In these days of extreme specialization it is becoming increasingly important to maintain an adequate sense of perspective and to review the aims and objects that we have in mind when we undertake our investigations. There is always a danger that a specialized branch of research may become fashionable and be continued for that very reason rather than because of its intrinsic merits. In viewing the research prospects of the new Jodrell Laboratory we must remember that it has come into being in an age of almost unparalleled changes throughout the world. These changes are bound to have an impact on our botanical work. In particular, air travel is opening up possibilities that were not previously available to us. As we fly over deserts, oceans, moun-

tain ranges and the dense forests of the tropics, we are reminded, for example, that only a small proportion of the world's species has been examined under the microscope; that soil erosion is active in many regions, and unless we press on with our task of microscopical examination there is a danger that many species will have become extinct before we have even taken a really close look at them. Meanwhile, in our universities the interests of botanical students are largely determined by the relative mark-earning values of different disciplines. Among these a knowledge of the world's vegetation and of the sheer diversity of form exhibited by the plants of which it is composed does not appear to rank very high. There is, therefore, a danger that modern students will not be taught to view the excitements of ultra-structure against the broad background of the tropical forest. This lack of sense of perspective can lead to a wrong sense of values and we may even forget what botany is all about. It is, therefore, particularly appropriate that there is a widespread hope that the opening of the new Jodrell Laboratory will mark the beginning of an era of closer co-operation between Kew and the universities, a form of symbiosis which could, in favourable circumstances, be of great mutual advantage to all concerned. It is, for example, to be hoped that Ph.D. students will be able to make use of our laboratory facilities when engaged on studies for which the Jodrell Laboratory is a particularly suitable centre. Then again, our lecture theatre should facilitate collaboration between Kew and the universities, since it will provide an appropriate setting for meetings of learned societies as well as for groups of students. It will also enable our visiting research workers, who come from all over the world, to make the nature of their investigations more widely known. The lecture theatre will also provide more adequate opportunities to make the scientific work of Kew more widely known among the general public.

The opening of the new laboratory has provided our student gardeners with much better facilities for their lectures, laboratory work and for social gatherings than were ever available before. At the same time their training is being modified in such a way that good use can be made of the teaching accommodation which is now available. If all goes well they should indeed be fortunate, for there can be few students who have both horticulturists and botanists of high standing as their mentors and are at the same time privileged to work in the midst of the wealth of living plants that are in cultivation at Kew.

In conclusion, it may be said that the new Jodrell Laboratory is a well-knit unit that will serve alike as a research centre and for teaching and discussion, and which will also provide a means of communication between Kew and other botanical institutions as well as with the general public. Both staff and students have better facilities and equipment than their predecessors and, if these are rightly used, there is every expectation that our knowledge of plant life will be both widened and deepened. The staff already feel

greatly stimulated by their new environment for we are finding by experience that the new building is a wonderful place in which to work.

C. R. METCALFE, *Keeper of the Laboratory.*

—

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GROUP OF KEWITES CONTEMPORARY WITH MARIO ERCOLI, WHO IS NOW
SUPERINTENDENT OF PARKS, BODIGHERA.

Taken at La Mortala on May 7th, 1965, on the occasion of the visit of delegates attending the first European Conference of Park Administration at Monte Carlo, Monaco, May 2nd—7th.

Left to right: K. McCreadie, Southend; Mario Ercoli; A. J. Brown, Wigston; W. Nelmes, Cardiff; B. W. Allison, Salford; E. W. Studley, Portsmouth; C. R. Stock, Bromley; R. C. McMillan, Manchester; C. W. Rudd, Harringay.

[Thank you, Mr. Stock.]

OBITUARIES

MONTAGUE FREE.

This distinguished Old Kewite passed away on January 27th, 1965, at Canton, New York where, with his wife, he had gone to spend the winter with their son and daughter. While restricted in his activities for the last three years, he was able to keep up with his literary work for the *Flower Grower Magazine*.

Born in Cambridge, December 12th, 1885, he began his gardening career in the Cambridge Botanic Garden, where for six years he acquired a basic training in the various departments. Then followed two years at Miss Willmott's famous garden, Warley Place, and from this he entered Kew, in May, 1908.



Having worked for a short term in the Palm House, he was transferred to the Herbaceous and Alpine Department, where he was soon promoted to sub-foreman. We shared the same "digs" for a time, and left Kew together in March, 1912, to try our luck in the United States, a move we never regretted.

After experience in the horticultural department of Cornell University, as Instructor at the Pennsylvania school of horticulture for women, and then as Foreman, for a New York firm of landscape contractors, in 1914 he was appointed Head Gardener and Horticulturist at the newly established Brooklyn Botanic Garden. Here for thirty-one years he demonstrated his skill as a cultivator, lecturer and writer. His educational exhibits at the New York International Flower Show gained several gold medals for the garden and enhanced his reputation.

With his great experience in rock gardening he was an obvious choice to become President of the American Rock Garden Society in its early days. During the first world war, he supervised war gardens in Brooklyn, and was a member of the Draft Board in the second world war.

It was largely due to his efforts that the Association of Kew Gardeners in America was founded in 1916. He served as President for several years and always enjoyed meeting fellow Kewites.

He received several awards. In 1939, a Gold Medal for "25 years service to horticulture" at the Brooklyn Botanic Garden; in 1949, The Thomas Roland Medal of the Massachusetts Horticultural Society for "skill in horticulture"; in 1953, The George D. Pratt Medal for "horticultural achievement", presented by the New York Horticultural Society; and in 1955, a Citation from the American Horticultural Council, for a "lifetime of service and devotion to horticulture".

He was the author of several books that became popular. His first—"Gardening, a complete guide to Garden Making", was published in 1937. This was followed by other practical books on "House Plants", "African Violets", "Perennials", "Plant Propagation" and "Pruning". He also wrote bulletins for the Botanic Gardens, and for years, conducted a question and answer column for the *New York Sun*.

In 1945, he left Brooklyn, to become Staff Horticulturist of the *Home Garden Magazine*, and from 1954 until the end, he was Senior Editor of *Flower and Horticultural Consultant* for Doubleday and Co., book publishers. He was a member of the Royal Horticultural Society, the New York and American Horticultural Societies, the New York Hortus Club, the African Violet Society of America, the American Iris Society, and the American Rose Society. His influence on American horticulture was thus far reaching. After leaving Brooklyn he took up residence in Hyde Park, N.Y., where he served as vestryman at St. James' Episcopal Church for ten years.

He is survived by his wife, Maude, who fully shared in all his activities for thirty-eight years; by a son, Roger M.; a daughter, Miss Winifred M.; and two grandchildren. To each, sincere sympathies are extended.

H. E. DOWNER (1912).

L. B. J. MILLER.

Leo Bernard James Miller died on October 23rd, 1963, at the age of 58. Miller entered Kew in July, 1930, after spending three years at Rothchild's Garden at Exbury and three years at Walhampton, another well known Hampshire garden. At Kew he proved an excellent plantsman and was appointed to the important charge of the Banana House which was devoted to the cultivation of disease resistant clones. He succeeded J. L. Haskeen in this charge.

J. MACKAY.

On the 24th August, 1963, J. Mackay, Jnr., met Sergeant W. Leaver of the Constabulary to scatter his father's ashes in the Gardens. John Mackay entered Kew in May, 1897, becoming Sub-Foreman of the Orchids. He left Kew in January, 1901.

JOHN LAMBOURNE

The death at High Salvington, Worthing, Sussex, on November 9th, 1965, of John Lambourne will be learned with regret by the older ex-members of the Department of Agriculture, Malaysia, and his friends in England, including those retired from Service. Johnny was born in Sussex and came to Kew in 1909. He served in the Temperate and Tropical departments and was later deputy foreman in the Palm House. He was a botanist of distinction.



In 1912 he was appointed to the Malayan Agricultural Service being stationed as manager of Sapintas Coconut Estate on the River Bernam. Later for some years he managed Castleton Rubber Estate at Teluk Anson. After home leave in 1926 he was put in charge of a division of the Central Experimental Station at Serdang, Selangor. In this post he conducted trials and experiments on the cultivation of all kinds of tropical crops other than coconut, rice and rubber. Thus tea, coffee, oil palms, fruits, food crops, fibres, spices, drugs and essential oils were included.

Lambourne wrote many articles on tropical crops which were published in the Malayan Agricultural Journal. During the whole of his career he was engaged in advisory work by correspondence and with visits to estates and villages. For many years he was an active member of the Malayan Volunteer Force.

Johnny retired from the Colonial Service in 1937 and took up residence near Worthing. During the Second World War he was engaged on local defence work, being a warden, fire guard officer and a lecturer. He also became Hon. Secretary of Storrington Village Produce Association.

John Lambourne was a modest, unassuming, lovable and well respected citizen and was always cheerful, industrious and of great integrity. He leaves a widow and two daughters, the eldest is Mary who is married and in New Zealand. Joan, who is a teacher, is living with her mother at High Salvington. To his widow and family we offer our deepest sympathy.

T. D. MARSH, *A colleague in Malaya.*

LEWIS STENNING, M.B.E., V.M.H., A.H., R.H.S.,
CURATOR, ROYAL BOTANIC GARDENS, KEW.

A very brief note at the foot of the frontispiece of the last issue (1964) *Journal* reported the death of Mr. L. Stenning, which occurred in the West Middlesex Hospital on March 4th, 1965, at the age of 63, after a long illness.

“Lew” or “Sten” as known to his wide circle of friends and also to many Kewites, had devoted many years to the service of the Guild and to members, old and young, he will be remembered for his sterling service as Honorary Treasurer, a responsible office which he held with distinction for over 28 years



—a record which in all probability will never be broken. He was also a Trustee, and since giving up the Treasurer's duties, continued to serve on the Committee in an advisory capacity.

He will be remembered too, for his tremendous enthusiasm and readiness to devote time and interest to the general affairs of the Guild; the annual dinners and teas. At these functions he was always to the fore and one of his greatest pleasures was to greet and chat with old and young Kewites, with whom he corresponded in his capacity as Treasurer. The Guild has lost one of its most devoted members and one who worked so hard for its interests and stability. Many of the younger generation of Kewites will recall Mr. Stenning's kind and friendly help which he was always ready to give during student days. Many derived great benefit from his advice and tuition.

Born in Scotland, Stenning on leaving school commenced his horticultural career as a boy in the gardens at Gilmilnscroft in Ayrshire. He soon moved south and in 1915 entered the gardens at Headington Hall, Oxford. Here he gained all-round experience, particularly of fruit and vegetables and also indoor plants. After five years he moved on to the Oxford Botanic Garden, and it was here under the skilful guidance of the late Mr. W. Baker, a noted Kewite, that he began to specialize in the cultivation of Orchids and other stove and greenhouse plants. Eventually he was promoted to take charge of the indoor section of the garden. With

five years valuable experience at Oxford, his next move was to Kew, which he entered as a Student Gardener in February, 1925. He was posted to the Tropical Department under the late Mr. T. W. Taylor, who soon recognised his qualities as a plantsman and within a comparatively short time, he was promoted to sub-foreman of the Ferneries. Later he was moved to take charge of the Orchids and T. Range.

In September, 1929, Mr. Stenning was promoted to the responsible position of Assistant Curator of the Tropical Department and this position he held with distinction for 31 years until being appointed Curator of the Gardens on 1st October, 1960. Unfortunately ill health was to interfere with his work as Curator and prevent him continuing his many activities on various committees at the Royal Horticultural Society and other associations.

Amongst his activities at Kew Mr. Stenning devoted himself with enthusiasm to the Mutual Improvement Society, and for a number of years he served as its Chairman. He was a keen supporter of the Sports and Social Club and for some years captained the Gardens Cricket Team. Mention could be made of numerous other activities to which he devoted his time freely and with great enthusiasm. This particularly applied to the Annual Socials and Dances.

His services to horticulture were recognised by the Royal Horticultural Society in 1955, when he was made an Associate of Honour, and again in 1964 with the highest award of the Society, the Victoria Medal of Honour. For his official work at Kew, he was made a Member of the British Empire in 1960.

To Mrs. Stenning we extend on behalf of all members of the Guild, our deepest sympathy in her irreparable loss.

S. A. PEARCE.

JOHN ELLIS

John Ellis passed away at Wellesley, Mass., in the spring of 1963. He entered Kew in July, 1911, served as sub-foreman in the Decorative Department, and left in 1915 for the United States. After a short stay with the late Montague Free in the Brooklyn Botanic Garden, he obtained a position with the Botany Department of State College, Penna. In 1921 he succeeded me at Smith College, Northampton, Mass., where he did a good job for ten years. He then moved to the Walter Hunnewell estate at Wellesley, Mass., and succeeded another Old Kewite, the late T. D. Hatfield, as Supt. of its famous arboretum and gardens. Here his skill as a cultivator was evident in all departments. He was active in the Massachusetts Horticultural Society and the Boston Florists and Gardeners Club. We often had the pleasure of judging Flower Shows together and it was on such an occasion that I last saw him, a few years before he died. He was a keen plantsman. He is survived by his wife, a son and two daughters.

H. E. DOWNER (1912).

THOMAS HUNTER.

We regret to record that T. Hunter died in April, 1965, at the age of 80 years. Hunter entered Kew in 1908 and took a full part in most of the current activities, especially football and the Mutual Improvement Society. At Kew he was regarded as an extremely good fellow, although a little deaf he was always cheerful and full of good humour, being an active and energetic personality.



In the latter half of 1911, acting upon the advice of Sir D. Prain, Director of Kew, Hunter took the post of Curator to the agricultural department of the Gold Coast, W. Africa. He was posted to the Botanic Gardens, Aburi, which was then the headquarters of the Department. His enthusiastic energy and determination to improve the Gardens won him popularity, especially with the African members of the staff and youthful learners.

After two years at Aburi, Hunter was transferred to Ashanti, where he became Curator of Kusami Agric. St. At this time there was a desperate need of some form of training for young Africans wishing to become agricultural officers. In the absence of any facilities in local schools the department undertook training at the various gardens and stations. This was not completely satisfactory, and Hunter, always an enthusiast, was eager to devote more time to this training. He made a convincing case for the establishment of a training centre at Kumasi and within two years he had the nucleus of the scheme in operation with twelve resident pupils and a growing demand for more places. The number of students increased by 1925 to forty-eight with an intake of twelve students a year undergoing a three-year course. Thus the centre became a noted place, Hunter making a feature of practical knowledge, and in all his teaching, he insisted that students were capable of demonstrating their learning to the uninitiated.

Hunter continued in charge until 1931, when much to the regret of all members of the department, he retired. His twenty years of loyal and devoted service to the Gold Coast, and his remarkable enthusiasm and energy, will long be remembered.

In his retirement he settled down at Chippenham where he soon became engrossed in local affairs. He became secretary of the hospital carnival committee and during the following twenty years helped in raising many thousands of pounds. In 1939 he was appointed Honorary Secretary of the hospital and later became a founder member of the League of Friends of Chippenham Hospital. He continued as Secretary of this latter organisation until his death. He also carried out hospital and warden's duties during the war.

Hunter also engaged in many other activities connected with charitable organisations. He celebrated his Golden Wedding Anniversary in 1963. We extend our very sincere sympathies to his widow and daughter.

A. C. MILES (1909).

LEONARD FREDERICK McELROY.

We regret to record the death of L. F. McElroy at Green Lane Hospital, Auckland, on 5th July, 1965, at the age of 49. McElroy served in Kew as a boy from April, 1930, to March, 1933. He worked at Knap Hill Nursery, Woking, from April, 1933, to July, 1935, where he took charge of the Propagation Pits. He then worked at Messrs. R. W. Wallace and Co. Ltd., Tunbridge Wells until he entered Kew as a student gardener in May, 1939. He passed the National Diploma of Horticulture while a student gardener.

His enlistment in the Forces was in January, 1940, when he joined the East Surrey Regiment. He obtained a commission with the Royal Horse Artillery in the Middle East and rose to the rank of Captain, later serving with Major-General Wingate's forces in Burma. McElroy went out to New Zealand in 1948 to join the staff of the Lincoln College, Christchurch. At the time of his death he was Landscape Officer for the Auckland district of the Ministry of Works.

McElroy will be remembered at Kew for the serious way in which he took his profession. He always paid great attention to duty and never failed to be punctual. He was meticulous in his work and had a very good plant knowledge. Kewites of 1947/48 vintage must and always will remember McElroy.

The Kew Guild has lost a very keen and capable member.

G. HOPKINS.

George Hopkins died at the age of 66 in October, 1962, after a very short illness. He entered Kew in 1921 and left in 1926. At the time of his illness he was with Messrs. Douglas of Great Bookham, Border Carnation and Auricula Specialists.

WALLACE F. GODFREY.

We deeply regret to announce the passing of this very faithful Old Kewite on November 3rd, 1965, in Tankerton Hospital, Whitstable, Kent, aged 72. S. V. Ovenden (1928) of Margate writes —“ We used to visit each other during the years. He was a very good gardener of the old school and was very proud of the fact that he was Sir Harry Veitch's youngest foreman. At 21 he was in charge of the glass-houses”.



Godfrey, a native of Ottery St. Mary, Devon, started his career at Lord Clintons' estate at Bicton.

After five years' service he moved to Veitch's, Feltham, for two years. He entered Kew in July, 1915. From January, 1916, to September, 1919, he served with the Civil Service Rifles and then returned to Kew. A year as sub-foreman followed before joining his mother and brother in a nursery business at Whitstable. During the second world war he took an appointment with the Air Ministry and was engaged with camouflage work in Cambridgeshire. Afterwards he managed a nursery at Broadstairs.

Reluctantly we turn the page as we realise that one more link with the grand days of Veitch's nurseries has been broken. We send our very sincere sympathies to his widow, and to their son, who is in Canada.

We also regret to record the death of the following :—

- *E. S. Dodd (1910).
Van. Audenaerde.
- *F. Lazenby (1900).
A. W. Tidy (1910).
G. H. Cave (1896).
W. E. Marriott (1904).
- N. Y. Sandwith (Herbarium Staff) on May 7th, 1965.
- *J. Binter (1917).
- *P. Cholet (1916).

We intend to publish suitable obituaries for these in the next issue of the *Journal*, but we would like more information on those marked *.

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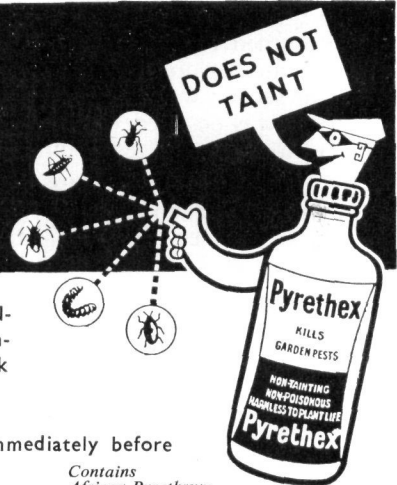
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KEW STAFF LIST.

(as on 1st December, 1965.)

* Life member of the Guild. † Formerly a Student Gardener.
‡ Acting.

	<i>Entered Kew</i>
DIRECTOR'S OFFICE	
Director	Sir George Taylor, D.Sc., F.R.S.E., F.L.S., V.M.H. 1956
Deputy Director, Keeper of Herbarium and Library (D.C.S.O.).....	J. P. M. Brennan, M.A., B.Sc., F.L.S. 1948
Secretary (Chief Executive Officer)...	R. W. King, D.F.C. 1959
Higher Executive Officer.....	J. G. Hicks ... 1964
Executive Officer	R. Fender ... 1958
" "	B. J. Kotulanski ... 1965
Clerical Officer/Secretary	Mrs. A. M. E. Kendall ... 1947
Clerical Officer	G. F. Lamb ... 1951
" "	G. A. Calcutt ... 1959
" "	H. D. Barlow ... 1961
" "	F. A. Cole ... 1961
" "	Miss I. C. McFarlane ... 1959
" "	L. E. Wood ... 1965
" "	Mrs. I. V. Render ... 1965
" "	Mrs. L. M. M. Perrett ... 1965
Clerical Assistant	Mrs. R. E. Fairbanks ... 1962
" "	Mrs. F. I. Hughes ... 1962
" "	Mrs. F. L. Upton ... 1964
Shorthand Typist	Miss P. C. Hawkins ... 1965
Telephone Operator	Mrs. E. M. Kedge ... 1965
HERBARIUM AND LIBRARY	
Deputy Keeper, S.P.S.O.....	E. W. B. H. Milne-Redhead, T.D., M.D., F.L.S. 1928
Senior Principal Scientific Officer.....	R. Melville, B.Sc., Ph.D., F.L.S. ... 1934
" " " "	R. W. G. Dennis, B.Sc., Ph.D., F.L.S. 1944
Principal Scientific Officer.....	A. A. Bullock, B.Sc., F.L.S. 1929
" " " "	*J. R. Sealy, B.Sc., F.L.S. ... 1927
" " " "	R. D. Meikle, B.A., LL.B., F.L.S. 1947
" " " "	D. A. Reid, B.Sc., Ph.D. 1951
" " " "	W. D. Clayton, B.Sc., A.R.C.S., F.L.S. 1958
" " " "	F. N. Hepper, B.Sc., F.L.S. 1950
Senior Scientific Officer	D. R. Dring, B.Sc., Ph.D., F.L.S.... 1962
" " " "	L. L. Forman, B.Sc., F.L.S. 1951
" " " "	Miss F. M. Jarrett, M.A., Ph.D., F.L.S. 1959
" " " "	C. Jeffrey, B.A. 1957
Scientific Officer	P. F. Hunt, M.Sc., F.L.S. 1959
" "	E. R. Guest, B.Sc., A.R.C.S., A.I.C.T.A.(Iraq) ... 1959
" "	R. M. Polhill, B.A., F.L.S. (O.D.M.) 1961
" "	D. R. Hunt, M.A., A.R.C.O. 1961
" "	A. R. Smith, B.Sc., A.L.S. 1962
" "	G. Ll. Lucas, B.Sc., F.L.S. (O.D.M.) 1963
" "	R. K. Brummitt, B.Sc., Ph.D. (Fl. Zamb.) ... 1963
" "	H. K. Airy Shaw, B.A. (Bentham & Moxon) ... 1925
" "	Miss D. M. Napper (O.D.M.) ... 1965

	<i>Entered Kew</i>
Principal Research Fellow	B. Verdcourt, B.Sc., Ph.D., F.L.S. 1964
Senior Experimental Officer.....	P. G. Taylor, F.L.S. 1948
Experimental Officer	J. K. P. Kennedy-O'Byrne, F.L.S... 1948
" "	J. R. Tennant, B.Sc., F.L.S. (O.D.M.) 1956
" "	M. M. Lazarides, Australian Liaison Botanist 1965
" "	Miss S. S. Hooper, B.Sc., F.L.S. 1954
" "	Miss M. I. Skan, M.B.E. 1919
" "	D. Philcox, M.I.Biol., F.L.S. 1959
" "	C. C. Townsend 1959
" "	D. V. Field, B.Sc. 1960
Assistant Experimental Officer.....	M. J. S. Sands, B.Sc. 1959
" " "	D. N. Pegler, B.Sc. 1960
" " "	Miss J. K. Bowden, B.Sc., F.L.S... 1949
" " "	Miss E. Braley-Smith (O.D.M.) ... 1965
Senior Scientific Assistant	Miss J. Forster 1947
" " "	Miss I. Blewett 1941
" " "	Mrs. J. L. M. Pinner (Miss Fletcher) 1952
" " "	Miss T. A. Bence 1958
Scientific Assistant	J. L. Gilbert... 1955
" "	Miss P. Halliday 1947
" "	Miss J. McEwan 1956
" "	Mrs. P. Z. Kennedy-O'Byrne (Cyprus) 1955
" "	Miss A. C. Uchlein 1955
" "	Mrs. D. Polhill (Miss O. Moscoff) (O.D.M.) 1957
" "	Miss V. Mann 1958
" "	N. H. Sinnott 1963
" "	Mrs. M. J. Bowen-Jones 1963
" "	Mrs. F. Neate, B.A. (P/T, O.D.M.) 1963
" "	Mrs. D. M. Bridson (Miss Shepherd) 1963
" "	Miss S. J. Willsher 1963
" "	S. A. Renvoize (Fl. Zamb.) 1963
" "	Miss V. A. Carder 1955
" "	Miss C. J. Hellet (Bentham & Moxon) 1964
" "	Miss S. E. Horton 1964
" "	Miss E. M. Bloomer 1965
" "	Miss V. F. Mulford 1964
" "	Miss H. Wood 1964
" "	Mrs. C. F. Buykx 1965
Senior Photographer	R. R. Zabeau 1956
Leading Illustrator	Miss M. A. Grierson 1960
Librarian	R. G. C. Desmond, F.L.A. 1961
Assistant Librarian	R. Davidge, B.A., A.L.A. 1958
" "	Miss K. E. W. Rattue 1961
" "	Miss G. M. Grainger 1964
Library—Clerical Officer	Miss M. J. Kierans 1934
" " "	Mrs. P. G. Warris 1961
" " "	Miss H. M. White 1959
" " "	Mrs. E. J. Everett 1963
" " "	Mrs. K. E. Mortimer 1964
" " —Clerical Assistant	Mrs. D. G. Marsh 1962
" " —Typist	Mrs. V. A. Ciimance (née Miss V. Cole) 1960
Senior Laboratory Attendant	Mrs. H. Wootton 1949

Entered
Kew

Laboratory Attendant	Mrs. V. A. Lamb	1965
" "	Mrs. L. C. F. Glenister	1956
" "	Mrs. D. I. Mitchell... ..	1954
" "	Mrs. M. W. Glover	1960
" "	Mrs. H. Dzilna	1954
" "	Mrs. E. M. Tooth	1965
" "	Miss I. L. Taylor	1959
" "	Mrs. V. E. Baker	1959
" "	Mrs. D. B. Boaler	1962
Assistant (Bentham & Moxon).....	P. Heawood	1960
" "	Miss C. Newall	1961
" "	Mrs. S. M. Shury	1960
Clerical Officer	D. D. Cobb	1964
" "	Miss G. M. Pring	1954
Clerical Assistant	Mrs. I. I. Scott	1963
Shorthand Typist	Miss G. M. N. Briggs	1962
" "	Miss C. F. Fergusson	1965
Typist (Supervisory All.)	Mrs. M. J. Brind	1955
" "	Miss I. M. Chambers	1961
" "	Mrs. B. C. Davies (O.D.M.)	1965
" "	Miss M. E. Long (O.D.M.)	1959
" "	Mrs. M. M. Longman	1947
" "	Mrs. I. E. Lightman	1964
" "	Miss J. E. Sullivan	1965
" (P/T)	Mrs. E. N. Attwood	1964
" "	Mrs. E. J. Fitchett	1965
Senior Messenger	W. H. Nightingale	1965
Duplicator Operator	Miss P. A. Godfrey	1960
Gardener, Grade I	W. A. Mullins	1942

JODRELL LABORATORY

Keeper (Senior Principal Scientific Officer)	C. R. Metcalfe, M.A., Ph.D., F.L.S.	1930
Principal Scientific Officer	K. Jones, B.Sc., Ph.D., F.L.S.	1960
" "	P. A. Thompson, B.Sc., M.Sc., Ph.D.	1964
Senior Scientific Officer	Miss M. Y. Stant, B.Sc., Ph.D.	1950
Scientific Officer	D. F. Cutler, Ph.D., F.L.S., D.I.C.	1962
" "	C. J. Marchant, B.Sc., Ph.D.	1962
Experimental Officer	Miss M. Gregory, B.A.	1961
" "	F. R. Richardson	1934
Senior Scientific Assistant	Miss D. M. Catling	1950
Scientific Assistant	Mrs. A. C. Alexander	1965
" "	Miss C. A. Brighton	1965
Senior Photographer	T. A. Harwood	1965
Laboratory Attendant	Miss B. M. Young (P/T)	1963
" "	Mrs. E. Turrell (P/T)	1965
Junior Research Fellowship	M. G. Daker	1964
Shorthand Typist	Miss V. Horwill	1951

DEPARTMENT OF ECONOMIC BOTANY

Keeper (Principal Scientific Officer)...	F. N. Howes, D.Sc.	1926
Principal Scientific Officer (Quarantine Work)	T. A. Russell, B.Sc., A.R.C.S., A.I.C.T.A., Dip. Agric.	1954
Experimental Officer (Guide Lecturer)	Miss R. C. R. Angel, B.Sc.	1959
Information Officer	Mrs. B. Christopher, N.D.D.	1960
Museum Craftsman	A. J. Parkes	1960
Clerical Assistant	B. O'Dowd	1964
Scientific Assistant	R. E. Lycette	1963
Typist (P/T)	Mrs. M. Y. R. Dennis	1965

	<i>Entered Kew</i>
GARDENS	
‡Curator	‡S. A. Pearce, M.B.E., A.H.R.H.S., F.Inst.P.A. (Arboretum North) ... 1928
Assistant Curator	†G. H. Preston, F.L.S. (Herbaceous) ... 1934
"	†S. W. Rawlings, A.R.P.S. (Tropical) ... 1936
"	†G. E. Brown, N.D.H. (Arboretum S.) ... 1946
"	G. J. E. Yates, N.D.H. (Decorative) ... 1961
"	†J. B. Simmons, N.D.H. (Temperate) ... 1958
Supervisor of Studies	†L. Pemberton, N.D.H., Dip. Arb. H. J. Jackman (Decorative) ... 1949
Foreman Gardener	W. Bridle (Temperate House Pits) ... 1946
"	H. Bruty, B.E.M. (Ferneries Tropi- cal) ... 1946
"	P. G. Shutler (Arboretum S.) ... 1946
"	E. W. Macdonald (Succulents— Tropical) ... 1950
"	†A. J. Hale (Temperate House) ... 1955
"	†F. A. Larkbey (Decorative) ... 1947
"	†G. E. Nicholson (Orchids—Tropical) ... 1947
"	†A. G. Cook (Herbaceous and Rock Garden Prop.) ... 1948
"	†R. I. Beyer (Alpine and Herbaceous) ... 1959
"	†R. J. Sadler (Arboretum N.) ... 1951
"	†A. D. Schilling, Dip. Arb. (Arb. Prop.) (Seconded to Nepal until 1967) ... 1959
"	A. D. Stevens (Arboretum S.) ... 1956
"	R. L. Adams (Arboretum Nursery) ... 1964
"	†R. H. Rule (Palm House—Tropical) ... 1956
"	J. R. Woodhams (Tropical Pits) ... 1959
Shorthand Typist	Miss A. G. Barton ... 1953
Storekeeper	W. E. Farmer ... 1962
Bird Keeper and Pests Operator	H. Allen ... 1958
Seed Collector	J. Mateer ... 1952
"	J. M. Latto ... 1957
Propagators	F. L. Burnell ... 1946
"	H. J. Fliegner ... 1963
"	G. A. Herron ... 1963
"	M. Hutcheson ... 1963
Gardeners, Grade I	C. W. Preston ... 1922
"	C. H. Bowditch ... 1958
"	H. Hockley ... 1942
"	M. P. D. Cameron ... 1958
"	J. Slater ... 1945
"	Mrs. C. E. Bloss (P/T) ... 1964
"	J. Prudden ... 1956
"	D. J. W. Bernard ... 1960
"	Miss N. Duncan ... 1965
"	M. J. Harrington ... 1960
"	E. A. Pooley ... 1935
"	Miss G. Dawson ... 1959
"	R. Laws ... 1962
"	P. Spedding ... 1961
"	Mrs. D. J. P. Hills ... 1964
"	W. J. Holmes ... 1959
"	E. A. Pawlowicz ... 1958
"	A. M. Juett ... 1945
"	J. F. Norris ... 1956
"	J. P. R. Wickham ... 1964
CONSTABULARY	
Sergeant in Charge	W. Leaver, B.E.M. ... 1935

STUDENT GARDENERS OF THREE-YEAR COURSE

(Commenced 7th October, 1963)

A. L. Barnes	C. E. B. Gordon	R. Ince	D. Waddell
R. D. Bowen	C. Hart	J. E. M. Jones	P. E. Wilson
R. K. Edwards	P. D. M. Hitchen	J. Mitchell	
J. R. C. Endall	B. F. Howard	J. O'Connor	

(Commenced 5th October, 1964)

J. Beswick	G. M. Gaskin	A. R. Keevil	E. Saxon
W. E. Bessler	H. N. Goddard	B. A. Nash	E. Scarr
D. P. Coleman	J. P. Goodall	B. J. Penberthy	M. J. Tomlinson
M. J. Dawes	G. N. Graham	A. Rich	C. P. Wood
B. V. Frankland	M. Hart	A. R. Smith	

(Commenced 5th October, 1965)

A. H. Balfour	H. G. Heywood	G. A. Pattison	Miss E. Stevens
R. C. Cowley	C. Hindmarch	R. A. Pitt	D. Walshaw
M. R. Cudd	C. W. Jones	J. D. Roberts	A. D. Webster
S. W. Dyall	Miss M. M. Jones	S. C. Scarr	A. M. Weir
M. E. Fay	D. H. Miller	I. M. L. Shepherd	F. C. Yong
R. S. Hebb	Miss J. Nau	G. F. Smith	

IMPROVERS AND BOYS

P. Smallcombe	M. S. Macken	P. R. Chapman	T. M. Taylor
N. J. P. Kennealy	D. Norris	R. Long	R. A. Blake
M. R. Norton	N. J. Stone	P. L. Sherwood	C. Graham
G. W. Hinds	H. Groffman	R. Rose	M. Weightman
S. G. L. Cole	D. J. Windle	C. W. Webb	D. Pluck
G. T. Brooks	R. O. Johnson	B. J. Richards	W. Darvill

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ADDRESS LIST OF OLD KEWITES

(The Names of Past Presidents are preceded by a dagger, Life Members by an asterisk)

(The year of leaving Kew is indicated)

ABBREVIATIONS: H.G., Head Gardener; F., Foreman; N., Nurseryman; M.G., Market Gardener; C., Curator; A.C., Assistant Curator; D., Director; A.D., Assistant Director; M., Manager; S., Superintendent; A.S., Assistant Superintendent; D.S., District Superintendent; H.L., Hort. Lecturer; A.O., Advisory Officer; B.G., Botanic Gardens.

1936. Abbing, J., Beauwea Park, P.B., Grahamstown, S.A.
 1959. Adams, R., 45 Hillcrest Road, Offerton, Stockport, Cheshire.
 1938. *Addison, G. H., 45 Cavendish Place, Eastbourne, E. Sussex.
 1957. Addison, P., N.D.H., 14 Taunton Road, Wallasey, Cheshire.
 1960. Adshead, P., Rothley, Kingsgate Road, Winchester, Hants.
 1926. Agate, C. J., 7 Beach Road, Great Neck, Long Island, N.Y., U.S.A.
 1949. Ainslie, E., 18 Park Avenue, Eastwood, Leigh-on-Sea, Essex.
 1939. *Airey, J. E., Westmoor Gardens, Mansel Lacy, Hereford.
 1945. *Albert, Mrs. H. (Miss H. J. Stent), 65 Summet Street, Oyster Bay, Long Island, N.Y., U.S.A.
 1918. *Alcock, Mrs. N. L., M.B.E., F.L.S., c/o Dr. Bradley Moore, 3A Bath Road, Thatcham, Nr. Newbury, Berks.
 1962. Aldous, J., 15 Penn Road, Stevenage, Hertfordshire.
 1946. Allen, Miss B. (See Mrs. F. Christopher).
 1948. Allen, F. H., Coombe Villa, Wootton-under-Edge, Glos.
 1961. Allen, J., 21 Shepherds Walk, Cove, Farnborough, Hants.
 1930. Allison, B. W., D. Parks Dept., Salford, Lancs.
 1911. *Allt, W. S., E. Market Street, Hyde Park, N.Y., U.S.A.
 1956. Alphonso, A. G., B.G., Singapore, 10, S.S.
 1945. *Ambrose, Miss R. M. (See Mrs. J. Souster).
 1957. Amoah, G. K. A., Ministry of Works and Housing, P. & Gdns. Div., P.O. Box 43, Accra, Ghana.
 1926. *Anderson, A. W. C., N.D.H.(N.Z.), 224 Church Street West, Timaru, N.Z.
 1965. Anderson, G. H., B.E.M., 29 Glenwood, Harmans Water, Bracknell, Berks.
 1956. Andrews, B. R., Park Dept., City Hall, Edmonton, Alberta, Canada.
 1947. Andrews, R. H., 67 Chiltern Avenue, High Wycombe, Bucks.
 1922. *Andrews, W. G., 15 Lindsay Avenue, Levenshulme, Manchester, 19.
 1962. Anwyl, R. B., 234 Abbotsbury, Kings Beach, Pagham, Sussex.
 1954. Appleby, J., 53 Rathbone Road, Wavertree, Liverpool, 15.
 1964. Armony, A., 12 Queens Mansions, 230 Westend Lane, London, N.W.6.
 1947. *Armstrong, C. E., N.D.H., H.L., Kesteven Farm Inst., Caythorpe Court, Nr. Grantham, Lincs.
 1931. *Arnold, T. A., Box 90, Bedfordview, Transvaal, S.A.
 1920. Ash, Mrs. W. (E. M. Harper), 22 Palace Court, Hampstead, N.W.3.
 1944. *Ashby, Mrs. E. (F. A. Sharps), 145 High Street, Harston, Cambridge.
 1956. Ast, R., Duggelistrasse, 9, Cham/Z.G., Switzerland.
 1931. Atkins, L. G., N.D.H., 14 Wharfedale Drive, Fosse Estate, Newark Road, Lincoln.
 1958. Atkinson, Miss A. L. M., N.D.H., Agricultural Education Office, Bridge House, Bakewell, Derbs.
 1959. Atkinson, G., Kew Cottage, Calstock Road, Gunnerslake, S.E. Cornwall.
 1954. Attenburrow, D. C., c/o D. of Agriculture, P.O. Box 338, Nairobi, Kenya.
 1950. Attwood, C. A., Bel-Air, Ulgham, Morpeth, Northumberland.
 1910. *Aubrey, A. E., 83 Newbridge Street, Wolverhampton, Staffs.
 1946. Avery, Edwin, 2 Newport Road, Barnes, S.W.13.
 1939. *Aves, J. J., D.S., P.O. Box 1454, Parks Dept. Pretoria, S.A.
 1935. Bachelor, P. L., Glenchairn, Dover Ridge Avenue, Carlton, Nottingham.
 1906. *Badgery, R., 47 King's Ash Road, Paignton, Devon.
 1920. *Baker, E., The Myrtles, Bucknalls Lane, Garston, Herts.
 1947. Baker, M. E., 25 Springfield Road, Bury St. Edmunds, Suffolk.
 1939. *Balch, R. W., N.D.H.(N.Z.), A.S. of Reserves, 32 Montague Road, Dunedin, New Zealand.
 1961. Ballard, F., B.Sc., A.R.P.S., 24 Grove Park Road, Chiswick, London, W.4.

publications of the Guild. A member whose subscription is one year in arrears shall not receive further publications until his arrears be fully paid. The annual subscription is at present 15s. (Student Gardeners 10s.)

- (8) Any member whose subscriptions are fully paid may on the payment of a lump sum predetermined by the Annual General Meeting become a Life Member and be entitled to all the privileges of the Guild without further payment. A sum representing not less than one-half of each life subscription shall be invested in the name of the Trustees and the liabilities to Life Subscribers shall be clearly shown in the annual Statement of Accounts. The provisions of this Rule may be suspended by resolution of an Annual General Meeting for such period as the Annual General Meeting shall think fit.

Management of the Guild.

- (9) (a) The business of the Guild shall be conducted by a Committee composed of the officers and ordinary Committee members. The officers shall consist of the President, two Vice-Presidents, the immediate Past-President, the President-Elect, Honorary Secretary, Honorary Treasurer, and Honorary Editor. The ordinary Committee members shall consist of four present Kewites, twelve Old Kewites and two Student Gardeners.
- (b) Nine members of the Committee shall form a quorum. The Committee shall meet from time to time as may be necessary. Nine members of the Committee may by signed written notice to the Honorary Secretary request him to call a meeting of the Committee and if such meeting be not called within thirty days of the despatch of such notice the said nine members may themselves call a meeting of the Committee by twenty-one days' notice in writing sent to all members thereof.
- (c) The Committee may regulate its own proceedings by standing order or otherwise as it may think fit. No act or proceedings of the Committee shall be invalidated by any vacancy on the Committee or any sub-committee thereof on the grounds that a member of the Committee or of a sub-committee thereof was not qualified at or had become disqualified after the date of his appointment. The Chairman of the Committee shall at Committee meetings have no second or casting vote in the case of an equality of votes.
- (d) At least seven days' written notice of a meeting of the Committee shall so far as practicable be given to every officer and other members of the Committee.
- (e) A Chairman of the Committee shall be elected by the Committee to take the Chair in the absence of the President, the immediate Past-President, the President-Elect and Vice-Presidents.
- (f) There shall be two Honorary Auditors chosen from among members of the Guild who are not members of the Committee.

Election of Officers, Committee, and Auditors.

- (10) (a) The President, the President-Elect, Honorary Secretary, Honorary Treasurer, and Honorary Editor shall be elected annually at the Annual General Meeting. One Vice-President shall be elected annually at the Annual General Meeting and shall hold office for two years. Any vacancy among the officers shall be filled as soon as possible by co-option by the Committee, and any person so co-opted shall hold office until the conclusion of the following Annual General Meeting.
- (b) Four ordinary Committee Members (three of whom shall be Old Kewites) shall be elected each year and shall hold office for four years. They shall not be eligible for re-election for at least twelve months after the end of their term of office. Any casual

vacancy on the Committee shall be filled at the next Annual General Meeting, the member elected completing the term of office of the member whom he has replaced. The Student Gardener representatives shall be elected annually by the Student Gardeners.

- (c) One Honorary Auditor shall be elected each year and shall hold office for two years.
- (d) Candidates for election as officers or ordinary Committee members or Auditors may be proposed by any member of the Guild provided that the names of candidates be sent in writing to the Honorary Secretary at least twenty-eight clear days before the Annual General Meeting.

Meetings.

- (11) The Annual General Meeting shall be held at Kew on the last Saturday in August. At the Annual General Meeting the Report of the Committee and a Statement of the Accounts shall be submitted and election of officers and Committee members and Auditors shall take place. Fourteen clear days before the Annual General Meeting the Honorary Secretary shall circulate to all members with an address in the United Kingdom a financial statement together with the agenda of the meeting which shall include a list of candidates for election as officers or ordinary Committee members or Auditors together with their proposers.
- (12) A Special General Meeting of the Guild may be called at any time by the Committee and shall be so called within fifty-six days of receipt by the Honorary Secretary of a requisition in writing signed by not less than thirty-five members stating the purpose for which such a meeting is desired and setting out any resolution which it is desired to propose thereat. Notice of the meeting with an agenda thereof shall be sent to all members with an address in the United Kingdom at least forty-two days before the date appointed for the meeting. Amendments to any resolutions set out in the agenda shall be sent to the Honorary Secretary at least twenty-eight clear days before the date of the meeting and shall be sent by him to all members with an address in the United Kingdom at least seven clear days before the date of the meeting. No business shall be transacted at such meeting other than that specified in the notice and no amendment of any substance to any resolution proposed at the meeting shall be allowed. The Chairman of the meeting shall be nominated by the Committee.
- (13) The accidental omission to give notice of a meeting to or the non-receipt of notice of a meeting by any member shall not invalidate any proceedings or resolutions at any meeting of the Guild or any Committee thereof.
- (14) At a General Meeting each individual member whose subscription is fully paid up to the date of the meeting shall have one vote and no more except the Chairman who shall have a second or casting vote in the case of an equality of votes.

Alterations to the Rules.

- (15) These rules may be altered by a two-thirds majority of those present and voting at an Annual or Special General Meeting. Any proposals for the alteration of Rules shall be sent to the Honorary Secretary in writing at least twenty-eight clear days before the date of the Annual or Special General Meeting and shall be sent by him to all members with an address in the United Kingdom at least seven clear days before the date of the Annual or Special General Meeting.

Dissolution of the Guild.

- (16) A motion to dissolve the Guild may only be made at a Special General Meeting and to effect a dissolution at least three-quarters of the

members actually present and voting at the meeting shall vote in favour of the dissolution. If a motion to dissolve the Guild is carried by the said majority the Guild's surplus funds, property and assets (if any) shall be disposed of for charitable purposes in connection with education and research and particularly for such charitable purposes of education and research in connection with botany and horticulture as the members may at the said Special General Meeting decide, or failing any such decision to a charity connected with botany and horticulture to be nominated by the Director of the Royal Botanic Gardens, Kew, for the time being, to the intent that no member of the Guild shall receive any of the said funds, property and assets by virtue of his membership.

Property of the Guild and Trustees.

- (17) (a) The Guild may purchase or otherwise acquire and hold property of any nature and may sell lease mortgage or otherwise deal with the same. Any property belonging to the Guild may be invested in the names of not more than four and not less than two Trustees who may be appointed from time to time by the Committee and any vacancy amongst such Trustees shall be filled by the Committee. Such property may also be invested in the name of a limited company established by and under the control of the Guild for trust purposes.
- (b) Such investments may be in or upon such shares, stocks, funds, securities, investments, and property, real or personal, freehold or leasehold in any part of the world upon such terms and conditions (if any) as the Committee shall in their absolute discretion think fit and in all respects as if the Committee were the sole beneficial owners thereof. The Committee may from time to time direct the Trustees to sell vary and transfer such investments and property.
- (c) The Committee may deal with the said investments as if they were the sole beneficial owners thereof.
- (d) If legal proceedings of any kind are resorted to or defended by the Guild the Trustees shall on the instructions of the Committee but not otherwise prosecute or defend such proceedings either in the name of the Guild or in the name of the Trustees or otherwise on behalf of the Guild as may be necessary.
- (e) The Trustees shall in all respects act as required by the Committee and a copy of a minute of the Committee signed by the Honorary Secretary shall be conclusive evidence of its decision.
- (f) Any Trustee may be removed from office by a resolution passed at a meeting of the Committee by a vote of not less than three-quarters majority of the members of the Committee present and voting at the meeting. At least seven clear days' notice of a special meeting to remove a Trustee shall be given to all members of the Committee and the agenda for the meeting shall state concisely the reasons why the removal is considered necessary and the accused Trustee shall be permitted to make his defence orally or in writing.
- (g) The Trustees shall be effectively indemnified by the Committee from and against any liability costs expenses and payments whatsoever which may be properly incurred or made by them in relation to the trusts of the property and investments of the Guild or in relation to any legal proceedings or which otherwise relate directly or indirectly to the performance of the functions of a Trustee of the Guild.
- (h) Except where otherwise provided the Trustees may act by a simple majority of those present and voting at a meeting of the Trustees.
- (i) The Trustees shall from among their number appoint an Honorary Secretary.