



THE  
JOURNAL  
OF THE  
KEW GUILD

AN ASSOCIATION OF  
MEMBERS OF THE KEW STAFF  
PAST AND PRESENT

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1956

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LIST OF OFFICERS

*President:* C. E. HUBBARD, O.B.E., F.L.S.

*Trustees:* G. TAYLOR, D.Sc., F.R.S.E., F.L.S., V.M.H., and  
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Royal Botanic Gardens, 197 Kew Road, Kew, Surrey.  
(To whom all remittances should be addressed)

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*Hon. Editor:* G. E. BROWN, N.D.H.

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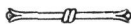
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T. F. RISELY

*Hon. Auditors:* E. COWARD and F. S. SILLITOE

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## EDITORIAL

Since the last *Journal* was circulated to members, a change of Editor has been forced upon the Guild by the appointment of Mr. E. Curtis to the position of Curator of the Botanic Gardens, Glasgow. It is hoped to maintain the excellent standard of this publication, which has given so much interest to all Old Kewites. Fortunately owing to the splendid efforts made by the members themselves, the financial difficulties are greatly being overcome and consequently it only remains now for this response to be continued for a further year or two when the funds of the Guild should be re-established on a sound footing. One of the main essentials is the regular payment of the annual subscription by everybody so that the cost of the *Journal* will no longer become a heavy liability but just an item which can very well be met from revenue. Please remember that your news and views may be of interest to others, and if the co-operation of members can be secured then there should be no question whatsoever about the continued high standard of the *Journal*.



## CHARLES EDWARD HUBBARD.

Charles Edward Hubbard was born at Appleton, Norfolk, a hamlet on the Sandringham Estate of H.M. Queen Elizabeth, on the 23rd May, 1900. His early interest in natural history was stimulated and fostered by his father, who encouraged his search of rare flowers and ferns to add to the wealth of species cultivated in the gardens of the Queen of Norway at Appleton. Educated first at Weston Newton School on the Royal Estate and later at King Edward VII Grammar School at King's Lynn, having decided on a horticultural career he commenced at the Royal Gardens, Sandringham, in 1916, under the famous gardener, Thomas Henry Cook. Here he received an intensive practical and theoretical training in all branches of horticulture, especially in the cultivation of hardy and greenhouse plants, fruits and vegetables. This enabled him to successfully pass the R.H.S. examination. For two years he served in the Sandringham Company of the Volunteer Training Corps before joining the Royal Air Force for a short period from August, 1918, to March, 1919. After demobilisation he continued his work at Sandringham until April, 1920, with the exception of some five months in 1919, when he assisted his father in replanning and planting the gardens of the King of Norway, near Oslo. This visit provided him with excellent experience in landscape gardening and also an introduction to the northern flora, including many of the rarer British species such as *Linnaea borealis*.

In April, 1920, he entered Kew as an Improver Gardener and afterwards became a Student, being posted to the Temperate House where, under the ever-critical eye of C. P. Raffill and the friendly aid of W. Harcourt, he found ample opportunity and encouragement for improving his knowledge of plants. Impressed by the wealth of material at Kew he spent his botanizing time and also many leisure hours attempting to memorize the distinguishing characters of as many as he could in the rather crowded two and a half years.

On completion of his training he was offered the post of Temporary Technical Assistant in the Herbarium where, with several other ex-Student Gardeners, he assisted in a variety of ways each of the prominent botanists of that world-famous Institution. In this way he received a valuable introduction to the methods of plant identification and classification, sources of botanical information, and to the curatorial duties involved in both maintenance and improvement. In addition to attending Kew lectures as a Student he studied botany, geology and chemistry at Richmond Polytechnic and later at Chelsea Polytechnic from 1923 until 1929.

From 1925 onwards under the kindly guidance of the late Dr. Stapf—the world authority on the *Gramineae*, he took part in the naming and classification of grasses and with this experience

coupled by reading the ever-increasing literature available in the Library, he gradually acquired an extensive knowledge of these all-important plants. This subsequently led to his appointment as a temporary Assistant Botanist in October, 1929, following which he continued to help Dr. Stapf with the preparation of the account of grasses for the Flora of Tropical Africa, and after the latter's death carried on with this work. In April, 1935, he was promoted to the rank of Botanist and placed in charge of the *Gramineae*. When the reorganization of the Scientific Civil Service took place he was graded Principal Scientific Officer and in 1955 accorded special promotion to the rank of Senior Principal Scientific Officer.

Accompanied by Rev. E. Ellman, he toured South and Central Spain in 1924 and collected about 1,200 specimens for Kew, whilst in 1930, at the request of the Queensland Government Botanist, he went to Australia for one year to revise the grass collection in the Herbarium at Brisbane. He was able to make extensive journeys in many parts of Queensland and to a lesser extent in the other States gathering numerous specimens of grasses, sometimes in areas explored by the Kew collector Allan Cunningham a century earlier, or as on Fraser Island, in the footsteps of another Kew man, Walter Hill.

Our President has contributed various publications devoted to grasses and in recognition of his work on *Gramineae* Her Majesty the Queen conferred on him in 1954 the O.B.E. He has served on the Councils of the Linnean Society, British Ecological Society, Botanical Society of the British Isles, and the Systematics Association.

Despite all his successes, our President remains the same quiet, unassuming and pleasing personality which made him so many friends when he first entered Kew.

### THE DIRECTOR, DR. GEORGE TAYLOR

Dr. George Taylor, who took over his duties as Director on October 1st, 1956, started his botanical career at the Royal Botanical Garden, Edinburgh, after graduating, with first-class honours in Botany, at Edinburgh University. While there he published a paper on adventitious growth in *Acanthus montanus* in Trans. Bot. Soc. Edin. 29, 291-296; and with J. R. Matthews on the stamen of *Erica hirtiflora* (op. cit. 235-242). Also while at Edinburgh he developed an interest in the genus *Meconopsis*, and accompanied the late Mr. Reginald Cory on a collecting tour in South Africa.

In 1928 he joined the staff of the Department of Botany at the British Museum (Natural History) as Assistant Keeper in charge of Gamopetalae and Apetalae, and worked chiefly on the Tropical African flora and helped in the enumeration of J. Gossweiler's Angolan plants (Journ. Bot.). His special interests were Labiatae

and Podostemaceae (various papers in Journ. Bot.). He published "An Account of the Genus *Meconopsis*" in 1934. In 1934-1935 he accompanied the British Museum Expedition to East Africa, visiting Ruwenzori and other East African mountains and making very fine collections.

He had always been keenly interested in British plants (being a Life Member of the Bot. Soc.), especially the flora of his native Scotland, and collected assiduously whenever the opportunity offered. In 1937 he began to specialise in the study of British Potamogeton, and with his colleague, J. E. Dandy, published a series of papers on the genus. He travelled far and wide in the British Isles to collect Potamogetons and made many interesting discoveries.

In 1938 he went to S.E. Tibet to join F. Ludlow and G. Sheriff in collecting plants for the British Museum and brought back an exceedingly fine collection. He contributed various families of Gamopetalae and Apetalae to A. W. Exell's "Catalogue of the Vascular Plants of S. Tomé", published in 1944.

Following the outbreak of war in 1939, he was transferred to the Air Ministry and was stationed at Harrogate. While there he devoted most of his spare time to the collection of Potamogetons, of which he built up a magnificent series which was all the more valuable as the British Museum's collection had been badly damaged by bombing during the early part of the war.

After the war he returned to the British Museum and was appointed Deputy Keeper of the Department of Botany in 1945 and Keeper in 1950. Administrative duties now hampered his systematic studies but he found time to resume his work on African Podostemaceae, publishing a paper in the Museum Bulletin and contributing an account of the family to the second edition of the "Flora of West Tropical Africa".

He has always been essentially an outdoor botanist, his chief joys being the collecting of plants and the cultivation of rare species, especially alpine, with which he crammed his garden at Rickmansworth. His skill in raising plants of this kind was recognised by the Award of the Victoria Medal of Honour.

On the organising side he has always been in the thick of things, as a Secretary of the British Association (Section K), Botanical Secretary of the Linnean Society, member of the R.H.S. Council, Council of the Society for the Promotion of Nature Reserves, etc., etc. Now he is President of the Botanical Society of the British Isles.

Dr. Taylor with his rich experience in both the fields which matter most at Kew, taxonomy of plants and horticulture, is welcomed by the staff and all Kewites, who wish him every success in the heavy and responsible task which he has now assumed.

## THE RETIREMENT OF SIR EDWARD SALISBURY.

Sir Edward Salisbury, C.B.E., D.Sc., F.R.S., who has been the Director of the Royal Botanic Gardens, Kew, for the past thirteen years, relinquished his post on September 30th, having reached the age of seventy earlier in the year.

This event closes a chapter—it will certainly not finish the book—of a career which has brought distinction to Sir Edward in many fields of applied botany. It is, perhaps, in the study of plant ecology and its application to agriculture and forestry that his greatest contribution to the advancement of botanical knowledge has been made. His specialized knowledge in these fields has made his advice of outstanding value on such bodies as The Agricultural Improvement Council, of which he was vice-chairman for many years, and of the Agricultural Research Council. He has been a member of the Scientific Advisory Committee to the Cabinet, vice-president of the Royal Horticultural Society, honorary adviser to the Ministry of Labour, vice-chairman of the Committee on Colonial Agriculture, a member of the University Grants Committee, as well as a member of the governing bodies of several leading universities and a number of scientific committees too numerous to mention.

Sir Edward's earlier academic work was done in the University of London, and it was during this time that he began his study of plant communities at Blakeney Point, with the late Professor P. W. Oliver, the Quain Professor of Botany at University College, whom he was destined to succeed in the professorial chair. He was President of Section K (Botany) of the British Association in 1937 and was elected to the Royal Society in 1933.

As biological secretary of the Royal Society for the decade 1945-55, his organizing ability and administrative wisdom have been of immense value to many committees of that body. For his services to science he was awarded a Royal Medal in 1945.

Many honours have come to Sir Edward during the years he has spent at Kew. Among these may be mentioned a knighthood in 1946 and honorary doctorates of Glasgow and Edinburgh Universities.

For his book, "The Living Garden," the Royal Horticultural Society awarded him a Gold Medal and, finally, as a mark of their appreciation of his services to horticulture, he was given the Victoria Medal of Honour in 1953. For his outstanding services to agriculture he was created a Companion of the British Empire in 1939.

After his departure from the onerous post of Director of The Royal Botanic Gardens, Kew, it is fortunate that Sir Edward's practical wisdom will be at the disposal of some, at least, of the bodies and committees he has served so well.

Sir Edward has been succeeded at Kew by Dr. George Taylor, D.Sc., F.R.S.E., F.L.S., V.M.H., Keeper of the Department of Botany, British Museum.

(Reproduced from "Agriculture," October, 1956, by the kind permission of the Editor, Mr. S. R. O'Hanlon.)

### ANNUAL GENERAL MEETING, 1956.

The Annual General Meeting of the Kew Guild was held on Saturday, August 25th, 1956, in the Iron Room, at 3 p.m., when the President, Mr. T. Sargeant, took the Chair with about 60 members present. The Notice of Meeting having been approved, the President asked members to stand in silence in memory of members S. H. Brien who left Kew in March, 1906, William Leslie who left in January, 1899, John Thomas Smith who left in April, 1911, and James Pirie who left in December, 1923, who had all passed on since the previous meeting.

The Secretary then read the Minutes of the previous meeting, which were approved, and with nothing arising therefrom the Hon. Treasurer submitted his final report. He referred to the balance sheet of 1955, available in the current issue of the *Journal*, pointing out that this showed considerable improvement in the financial position of the Guild. He then submitted a financial statement to the present date, and expressed his satisfaction at the wiping out of the deficit brought about in the Jubilee Permanent Security Fund when our finances were low. He stated that over £800 has been received towards this fund and hoped that in two years time the target of £1,000 originally set would be reached. He pointed out that all other funds were quite stable, and referred to various grants made from the Benevolent Fund. The President, in moving the adoption of the financial statement, called for a vote of thanks to Mr. Stenning for all the very hard work he had put in for many years as Hon. Treasurer of the Guild, and Mr. Coward seconded after expressing his own personal appreciation. The President's request was carried with a warmth of applause which expressed everybody's gratitude to the Hon. Treasurer.

The election of officers then took place, and Mr. Stenning proposed Mr. C. Hubbard should be elected President. He spoke of his early work as a Student and the very valuable contribution he had made to the establishment during his service in the Herbarium. Mr. Ballard seconded the proposition and this being put to the meeting was carried unanimously. Four vacancies had to be filled on the Committee and the following names were submitted and approved. Mr. L. Laking, proposed Mr. S. Pearce, seconded Mr. Sillitoe; Dr. C. R. Metcalfe, proposed Mr. V. Summerhayes, seconded Mr. Coward; Mr. G. W. G. Freeman, proposed Mr. A. Brooks, seconded Mr. Preston; Mr. D. W. Sayers, proposed Mr. Campbell, seconded Mr. Stenning. Mr. W. M. Campbell was re-elected Hon. Secretary and Mr. Stenning Hon.

Treasurer. The Secretary reported that Mr. E. Curtis, Editor of the *Guild Journal*, had had to resign his position on his appointment as Curator of the Botanic Gardens, Glasgow, and the name of Mr. G. Brown to become the new Editor was proposed by Mr. Pearce and seconded by Mr. Curtis. This was carried unanimously. The meeting expressed its appreciation of Mr. Curtis's work, and congratulated him on his promotion. The name of Mr. E. Coward was proposed by Mr. Campbell for the position as Auditor; this was seconded and carried.

The Secretary reported that Mr. Curtis had left the *Journal* arrangements in excellent condition, and it was hoped that with the enthusiasm of Mr. Brown the excellent standard achieved in the production of the *Guild Journal* would be maintained, and that it would be possible to have it available to members early in each year.

The Committee submitted proposals for the alteration of Rule 2 and this led to considerable discussion. Many members spoke on the subject whilst the Secretary read a letter from Mr. Dallimore in which he deprecated the proposed alterations. The deletion of the proposed class of Honorary Members was carried by 28 votes to 18, and finally the Hon. Secretary moved the adoption of the proposed rule as amended to include ordinary members and associate members. This was carried with one dissident.

Upon conclusion of the business, Mr. F. S. Sillitoe proposed a very hearty vote of thanks to the President. He stated that the President had carried out his work in a charming but business-like manner, and all appreciated his efforts. The President responded and stated what a great pleasure it had been to serve in that capacity, and he regarded it as one of the greatest honours which could be accorded to a Kew man. The meeting closed at 4.20 p.m.

#### ANNUAL DINNER, 1956.

The Annual Dinner was held on Wednesday, May 23rd, at the "Windsor Castle," Victoria, London, S.W. 1, when over 150 people were present.

After a very enjoyable meal the President, Mr. T. Sargeant, proposed the toast of Her Majesty the Queen. The toast of "The President" was then proposed by Mr. N. J. Prockter who stated that it had been his pleasure to have known Mr. Sargeant for over 30 years, during which period he had come to esteem him very highly, particularly for the very excellent horticultural work which the President had done so well, in his own quiet inimitable way. He spoke of Mr. Sargeant's early training at Kew, which was the stepping stone to a successful career, and which was followed by many decades in commercial work. During the early part of the 1914-18 war, he served with the original Flying Corps and later with the Royal Air Force. Upon com-

pletion of this service he returned to Mr. Skelton at the Nurseries, Pirbright, Surrey, and later joined the staff of Messrs. Cheal of Crawley. He proved himself a first class plantsman and a particularly keen exhibitor, being one of the first to show Alpine plants on a large scale in this country. Subsequently he gained great success with the firm of Stewart Brothers, Wimborne, and in 1930 joined Carters Tested Seeds, Ltd. For many years he travelled the country, lectured, and gave advice, always willing when called upon to benefit others by the wide experience and knowledge he had gained throughout the years. After the second World War the President became a co-director of Jackmans Nurseries at Woking. For thirteen years, probably some of the most difficult years to surmount, he had given his sound knowledge for the benefit of his firm, and those conversant with the quality of plants sent out by Messrs. Jackman will well understand the very high reputation which both the firm and Mr. Sargeant hold in horticultural spheres. One of the keenest supporters of the Kew Guild, it was a privilege to have such a man as our President, and he wished him good health and good fortune in his future.

In his response the President stated that he felt it a very great honour indeed to be elected to that important position, and thanked the members of the Guild for his nomination. To him it seemed that we are on the threshold of new advances, both in horticultural spheres and also in our everyday and business lives. He hoped that the younger generation of Kew men coming along would give very serious consideration and thought to their future. He urged them not to let it be said that they were "just a gardener," but by serious study and application to their work, fit themselves for positions of responsibility. Agriculture was making great advances, he stated, and horticulture marched side by side, so that in the future when atomic power will mean enormous changes in the way we live, Kewites will have adapted themselves to meet any new developments they are called upon to face. He wished that message to go out to all, and asked the assembly to rise and drink the health of the Kew Guild.

The Students' prizes were then presented by the President to the following:—

Matilda Smith Prize—Miss Angela Hopkins.

Hooker Prize—Mr. J. B. Boulton.

C. P. Raffill Prize—Mr. D. J. Moore.

Mutual Improvement Society's Prize—Mr. C. L. Baylis.

Dümmer Memorial Prize—Mr. A. V. Rippon.

Proudlock Prize—Mr. G. W. Messenger.

Attention was called to the first competitive woman Student Gardener who entered Kew in 1954. She had completed her two years' course of training along with the Students and had proved the most successful student of her period. Her average marks

were the highest of any throughout the two years and had gained for Miss Angela Hopkins the "Matilda Smith Memorial Prize."

Mr. H. Taylor, of the L.C.C. Parks Department, proposed the toasts of the official guests who on this occasion comprised of Dr. Stotter, of Fernhurst; Dr. Tubbs, of East Malling, and Mr. Roy Hay, of the Gardening Press. He spoke of the excellent scientific research work being carried out at Fernhurst where Dr. Stotter captained the team which worked solely to provide protection for plants. In their way they made our work much easier and Mr. Taylor hoped that Dr. Stotter would long continue to lead the research at Fernhurst. A tribute was paid to Dr. Tubbs, another eminent worker in the field of science, and after referring to his work on tea plantations, he spoke of the excellence of the East Malling stocks. Finally, he felt that we owed much to Mr. Hay, who had such wonderful opportunities in the propagation of the gospel of horticulture. In response Mr. Hay thanked the assembly for their great hospitality and hoped that the Kew Guild and the excellent work which it did would, like the Royal Botanic Gardens, Kew, prosper forever.

Before the assembly broke up, Mr. W. M. Campbell, as Secretary, called upon members for a special welcome to those Kewites home from overseas, and also to other horticulturists who were contributing their part in horticultural activities abroad.

In conclusion a get together was held until about 11 p.m., when the happy company dispersed.



### KEW GUILD GENERAL ACCOUNT, 1956

RECEIPTS		EXPENDITURE	
	£ s. d.		£ s. d.
Balance from 1955 a/c. ...	292 5 9	Printing the 1955 Journal, 900 copies, including H.T. Blocks	216 17 5
Annual Subscriptions and Arrears	148 5 1	Printing 200 copies "Chronicle of an Old Kewite" ...	11 5 0
22 Life Members donated	64 1 10	Hon. Editor's and Hon. Treasurer's Postages, including overseas Journals	5 4 6
Advertisements in 1955 Journal...	108 15 6	Refund £168 16s. 3d. to Jubilee Permanent Security Fund	168 16 3
Dividends on £300 3% New South Wales Stock, £9 0s. 0d.. less		Barclays Bank, Ltd. ...	28 15 5
Income Tax at 8/6, £3 16s. 6d.	5 3 6	Balance in Post Office Savings Bank	234 6 6
Dividends on £26 6s. 3d. 3½% War Stock	0 18 4		
Dividends on £500 3% War Savings—Sir A. W. Hill's bequest	15 0 0		
Dividends on £295 3% Savings Bonds (Jubilee Fund)	8 17 0		
Dividends on £220 3½% Defence Bonds (Jubilee Fund)	7 9 0		
Dividends on £295 4½% Defence Bonds (Jubilee Fund)	3 7 10		
Dividends on £220 4½% Defence Bonds—W. H. Judd's bequest	2 13 5		
Interest on Post Office Savings Bank	8 7 10		
	<u>£665 5 1</u>		<u>£665 5 1</u>

### KEW GUILD CAPITAL ACCOUNT

LIABILITIES		ASSETS	
	£ s. d.		£ s. d.
156 Life Subscribers at £1 at half rate	78 0 0	£300 3% New South Wales Stock	300 0 0
224 Life Subscribers at £2 at half rate	224 0 0	£26 6s. 3d. 3½% War Stock	26 6 3
112 Life Subscribers at £3 3s. 0d.	352 16 0	£500 3% War Savings—Sir A. W. Hill's bequest	500 0 0
7 Life Subscribers at £5 5s. 0d....	36 15 0	£200 4½% Defence Bonds—W. H. Judd's bequest	200 0 0
Assets exceed Liabilities	742 12 2	Valuation of Journals in stock...	144 15 0
		Barclays Bank, Ltd. ...	28 15 5
		Post Office Savings Bank	234 6 6
	<u>£1,434 3 2</u>		<u>£1,434 3 2</u>

### WATSON MEMORIAL EDUCATION FUND, 1956

RECEIPTS		EXPENDITURE	
	£ s. d.		£ s. d.
Balance from 1955 a/c. ...	149 12 8	Balance in Post Office Savings Bank	156 17 8
Dividends on £100 3½% War Stock	3 10 0		
Interest on Post Office Savings Bank	3 15 0		
	<u>£156 17 8</u>		<u>£156 17 8</u>
(Assets—£100 3½% War Stock and balance in Post Office Savings Bank.)			

### MATILDA SMITH MEMORIAL PRIZE FUND

RECEIPTS		EXPENDITURE	
	£ s. d.		£ s. d.
Balance from 1955 a/c. ...	32 16 8	Prize awarded to Miss A. D. S. Hopkins ...	2 2 0
Dividends on £50 3% Savings Bonds ...	1 10 0	Balance in Post Office Savings Bank ...	33 0 8
Interest on Post Office Savings Bank ...	0 16 0		
	<u>£35 2 8</u>		<u>£35 2 8</u>
(Assets—£50 3% Savings Bonds and balance in Post Office Savings Bank.)			

### DUMMER MEMORIAL PRIZE FUND

RECEIPTS		EXPENDITURE	
	£ s. d.		£ s. d.
Balance from 1955 a/c. ...	51 3 2	Prize awarded to A. V. Rippon ...	3 3 0
Dividends on £70 4% Funding Loan ...	2 16 0	Balance in Post Office Savings Bank ...	52 1 1
Interest on Post Office Savings Bank ...	1 4 11		
	<u>£55 4 1</u>		<u>£55 4 1</u>
(Assets—£70 4% Funding Loan and balance in Post Office Savings Bank.)			

### THE PROUDLOCK PRIZE FUND

RECEIPTS		EXPENDITURE	
	£ s. d.		£ s. d.
Balance from 1955 a/c. ...	8 9 1	Prize awarded to G. W. Messenger ...	1 1 0
Dividends on £25 4% Funding Loan ...	1 0 0	Insurance premium on Tennis Cups ...	0 7 6
Interest on Post Office Savings Bank ...	0 3 9	Engraving 2 Silver Tennis Cups ...	1 14 0
	<u>£9 12 10</u>	Balance in Post Office Savings Bank ...	6 10 4
			<u>£9 12 10</u>
(Assets—£25 4% Funding Loan and balance in Post Office Savings Bank.)			

### KEW GUILD JUBILEE PERMANENT SECURITY FUND

RECEIPTS		EXPENDITURE	
	£ s. d.		£ s. d.
Carried forward from 1955 a/c....	699 3 6	Invested—3% Savings Bonds ...	295 0 0
Donations from 84 members received and gratefully acknowledged ...	113 13 6	3½% Defence Bonds ...	220 0 0
	<u>£812 17 0</u>	4½% Defence Bonds ...	295 0 0
		Cash in hand ...	2 17 0
			<u>£812 17 0</u>

### THE BENEVOLENT FUND

RECEIPTS		EXPENDITURE	
	£ s. d.		£ s. d.
Balance from 1955 a/c. % ...	136 4 0	Donation of £5 5s. 0d. to Mr. R. Mason ...	5 5 0
Interest on Post Office Savings Bank ...	3 2 7	Donation of £5 5s. 0d. to Mr. H. Collin ...	5 5 0
		Donation of £2 2s. 0d. to Royal Gardeners' Orphan Fund ...	2 2 0
		Balance in Post Office Savings Bank ...	126 14 7
	<u>£139 6 7</u>		<u>£139 6 7</u>

### KEW GUILD MEMORIAL FUND

RECEIPTS		EXPENDITURE	
	£ s. d.		£ s. d.
Balance from 1955 a/c. ...	22 2 7	1 H.T. Block of Memorial ...	1 19 0
Interest on Post Office Savings Bank ...	0 9 5	Cost of Printing same in Journal	3 5 6
		Balance in Post Office Savings Bank ...	17 7 6
	<u>£22 12 0</u>		<u>£22 12 0</u>

### KEW GUILD DINNER, MAY, 1956 Held at the "Windsor Castle," Victoria

RECEIPTS		EXPENDITURE	
	£ s. d.		£ s. d.
Sale of Tickets—		To The Westminster Wine Co., Ltd.	
124 at 16/6 each ...	102 6 0	162 Dinners at 13/6 each ...	109 7 0
34 at 14/6 each ...	24 13 0	10% Service Charge ...	10 18 0
4 Guests ...	— — —	Gratuity to Commissionaire ...	1 5 0
		Menu Cards ...	1 17 0
		Balance, Cash in hand ...	3 12 0
	<u>£126 19 0</u>		<u>£126 19 0</u>

### KEW TEA, AUGUST, 1956. Held at Kew

RECEIPTS		EXPENDITURE	
	£ s. d.		£ s. d.
100 Members at 3/- each ...	15 0 0	To Messrs. John Gardner, Ltd.—	
1 Guest ...	— — —	101 Teas at 2/6 each ...	12 12 6
		Balance, Cash in hand ...	2 7 6
	<u>£15 0 0</u>		<u>£15 0 0</u>

Audited and found correct.

E. COWARD,  
F. S. SILLITOE, } *Hon. Auditors.*

April 3rd, 1957.

## MUTUAL IMPROVEMENT SOCIETY, 1955/56.

At the Annual General Meeting held on September 24th, 1955, the following officers were elected :—Chairman, Mr. S. A. Pearce; Vice-Chairman, Mr. L. Stenning; Hon. Secretary, Mr. D. J. Sales; Hon. Assistant Secretary, Mr. A. Paterson; Hon. Treasurer, Mr. J. G. Fleming; Committee members, Messrs. P. Addison and F. P. Ryder.

The Society has had another interesting and very successful season. The syllabus reveals the wide diversity of subjects dealt with in the lectures. Seventeen students have lectured to the Society and in addition six members have given lectureries on two evenings.

We again entertained the Walkerian Society of Cambridge Botanic Garden on the occasion of the annual debate. After a tour of the glasshouses, tea was taken at "The Nook" on Kew Green. A lively debate in the Iron Room followed and further refreshments were enjoyed before wishing them farewell. We were also invited to Wisley by the Lindley Society for a debate, which proved entertaining and instructive. Kew won by a narrow margin.

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

The Hooker Prize—Mr. John Boulton.

The C. P. Raffill Prize—Mr. Donald Moore.

The Society's Prize—Mr. Christopher Baylis.

A Saturday afternoon outing was held in the spring to Windsor Great Park. Later in the season we visited Sheffield Park.

Interest in the Society's activities has risen appreciably this year and a cordial and friendly spirit persisted. Attendances at meetings have averaged 34, the highest for several years. The Society has again had the benefit of Mr. W. M. Campbell and Mr. J. Souster as its Chairman and Vice-Chairman respectively, and owes much of its success to the help and advice they have so readily given.

J. BOULTON, *Hon. Secretary.*

### SYLLABUS

1955

Oct.	3.	*Plant Propagation—Recent Developments	Mr. F. Hanger
..	10.	Subterranean Harvest ... ..	Mr. P. C. Wyatt
..	17.	*Ferns in Malaya ... ..	Mr. A. G. Alphonso
..	24.	Irrigation ... ..	Mr. C. L. Baylis
..	31.	Municipal Decorations ... ..	Mr. F. Vickers
Nov.	7.	*The History of Garden Planning... ..	Miss A. Hopkins
..	14.	Raspberry Culture ... ..	Mr. T. O. Harvey
..	21.	Question Evening	
..	28.	Crematorium Planning and Procedure ...	Mr. H. Hind

Dec.	5.	The Modern Private Garden ... ..	Mr. P. G. Godley
"	12.	Lecturettes—Mr. R. L. Fugard, Mr. J. Jordan, Mr. R. Millard	
"	19.	Late-Flowering Chrysanthemums ...	Mr. N. C. Hickman
1956			
Jan.	2.	*The Work of The Jodrell Laboratory ...	Dr. C. R. Metcalfe
"	9.	The Toxic Effects of Air Pollution on Horticulture ... ..	Mr. R. Millard
"	16.	Lecturettes—Mr. W. Boot, Mr. D. J. Sales, Mr. T. Muller	
"	23.	Viruses—Chemical Control ... ..	Mr. G. T. Kemish
"	30.	Herbaceous Borders... ..	Mr. D. J. Pringle
Feb.	6.	The History of Horticulture in South Africa ... ..	Mr. R. L. Fugard
"	13.	*The Horticulturist in the Tropics... ..	Mr. T. A. Russell
"	20.	Heaths and Ericas ... ..	Mr. T. Elton
"	27.	The History of Kew Gardens ... ..	Mr. R. I. Beyer
Mar.	5.	Kew—Cambridge Debate: "That this house would prefer to direct a Parks Department rather than a Commercial Nursery." Motion carried 43-10	
"	12.	*General Horticulture in Bermuda ...	Mr. J. H. Jones
"	15.	Kew—Wisley Debate: "That the vast sums spent annually on Public Parks are far in excess of the real value of these gardens to the general public." Motion defeated 36-28	
"	19.	Some Adverse Effects of Modern Chemical Sprays ... ..	Mr. D. J. Moore
"	26.	Brains Trust. Team Members: Mr. C. Curtis, Mr. J. Sealy, Mr. J. P. M. Brennan, Mr. G. E. Brown	

\* Lantern Lectures.

### KEW BRITISH BOTANY CLUB, 1956.

At the Annual General Meeting held on April 15th, the following officers were elected:—Hon. Secretary, Mr. A. V. Rippon; Hon. Assistant Secretary, Mr. G. W. Messenger; Committee members, Messrs. T. Elton, W. Rogers, P. Addison and P. Jakobsen.

The President, Mr. F. N. Hepper, explained the objects of making a collection and gave practical hints on the collection and mounting of specimens. Some fine sheets by Mr. A. G. Cook were on view.

Brilliant weather greeted our first outing to Box Hill which, however, yielded few specimens owing to the late Spring.

Several trips, to such places as Syon House, Osterly Park, Hounslow Heath and Chobham Common, were held throughout the summer, often in persistently inclement weather.

The Annual Outing broke new ground by visiting the shingle and dunes in the Dungeness area. Dr. Francis Rose led the party, which included Dr. Turrill and several other members of the

Herbarium staff. The contrast in vegetation between the old and new shingle beds was interesting and such plants as *Silene maritima*, *Sedum anglicum* and *Armeria maritima* were found growing in profusion. Amongst the more uncommon plants were found *Vicia lutea*, *Silene nutans* and many *Carex* species; close to the shore fine clumps of *Crambe maritima* were growing. A fascinating and rewarding day ended at Rye, where tea was taken.

In September a long-awaited tour of the Herbarium was led by Mr. Hepper, who explained the work that goes on there and showed members some sheets of specimens in the collection and rare books in the Library.

The following lectures were arranged for the winter session :—

Mr. R. A. Graham—British Orchids.

Mr. J. Souster—Identification of Conifers.

Dr. G. E. Taylor (Director)—Pondweeds and Water-plants.

Six members submitted collections and the judges made the following awards :—The Dümmer Memorial Prize to Mr. R. Thomas; The Proudlock Jubilee Prize to Mr. A. Patterson; Mr. E. C. Neighbour was highly commended. Good collections were also submitted by Messrs. T. W. Dumont, J. Fleming and P. R. Jakobsen.

Thanks are due to Messrs. J. Souster, A. G. Cook and D. H. Kent, and all others who have supported the Club throughout the season.

G. W. MESSENGER, *Hon. Secretary*.

## SPORTS AND SOCIAL CLUB.

The Club has been strongly supported in all the various activities during the past season. At the Annual General Meeting in October the following officers were elected :—Chairman, Mr. S. W. Rawlings; Treasurer, Mr. S. A. Pearce; General Secretary, Mr. D. J. Moore. We take this opportunity of thanking the retiring General Secretary, Mr. D. J. Moore. He worked very hard to make the occasions successful and the Club prosperous.

### SOCIAL ACTIVITIES, 1956.

The Annual Dance was held in January at the Boathouse Hotel. It was very successful, both socially and financially. Our March Dance at the Boathouse left a favourable balance, but the band was a little disappointing. In order to gauge the success of a Summer Dance we held an experimental one at the Star and Garter Hotel, Kew Bridge, during July. Although it was a pleasant occasion it proved to be financially unsound. The last dance of the season was held at the Boathouse in November. So much depends on the band; it responded to our request for "strict tempo," but was too loud.

All enjoyed the Christmas Party at St. Luke's Hall. A private bar was arranged for members, while the catering, which was financed from the Club funds, was very ably managed by Mrs. Taylor, Miss Dunk and Miss Atkinson, with ready help from many others. Sketches were given by the staff of the Decorative "Pits," the Temperate House, the Palm House and the Ferneries. During the interval Mr. Bird and Mr. A. Vivian entertained us by singing American folk songs. The high-light of the evening was a performance of Mademoiselle Incognita (Mr. E. W. Macdonald) in "Snakes Alive." The Fancy Dresses were excellent and gave the judges, Dr. W. B. Turrill and Dr. and Mrs. C. Metcalfe, a difficult task to choose the four winners.

We were very fortunate in having Mr. Andrews to M.C. the Party and all the Dances. Much of their success can be attributed directly to his unsparing services.

In a similar manner we are indebted to Mr. and Mrs. Dunk for the success of our Whist Drives. They have brought in a profit of £1 each week. A Carol Singing tour was made by 18 members on the 18th and 21st December in aid of the Dr. Barnardo's Homes and the Star and Garter Hospital. A sum total of £18 7s. was collected, £5 of which was given to the Children's Homes and the remainder to the Hospital. On their first evening Dr. and Mrs. Metcalfe invited the singers in for refreshments, while the last tour ended with a drink at the Coach and Horses. Mention must also be made of the trip to see the show "Kismet" at the Stoll Theatre in March, and of the enjoyable New Year's Eve Party which some members attended at the Feltham Borstal Institute, as guests of the Officers' Social Club.

I would like to take this opportunity of thanking all those who have helped me in my work. Their assistance has been greatly appreciated.

E. C. NEIGHBOUR, *Hon. General Secretary.*

## RUNNING SECTION.

As was stated at the 1956 Annual General Meeting of the Club, this section is not often active, but when it is, activity reaches fever pitch. Though only a few events were held (and who really has the desire to run three miles more than twice a year), those held aroused considerable interest and enthusiasm.

### WISLEY TO KEW RACE.

This year four teams competed for the Pring Trophy—Kew, Wisley, East Malling and, for the first time, The Kent Horticultural Institute, Swanley.

The race began at approximately 2.30 p.m. on Saturday, March 24th, in quite good running conditions—cool and dry. The first stage was a fast one, with Kew 30 seconds behind. This

was quickly made up by Ast, who is a very determined runner. The third and fourth stages were evenly matched between Kew and Wisley, with East Malling and Swanley gradually losing ground. Wisley gained a hundred-yard lead over the fifth stage, but we were quickly reassured by Müller, who was some 50 yards ahead at the finishing post. Time—1 hr. 35 mins.

We had not long to wait for the Swanley and East Malling representatives to complete the course and after a refreshing shower, the four teams enjoyed tea at the "Kismet" restaurant, Kew Green. Dr. N. L. Bor kindly presented the Pring Trophy to the Kew team, and the Maori Batons to Wisley. The success of the race was celebrated with champagne, promised in an unguarded moment by Mr. E. Neighbour.

The final result in order of finishing was :—Kew, Wisley, East Malling and Swanley. The Kew team in order of running was :—H. Hind, R. Ast, G. Messenger, T. Dumont and T. Müller.

#### THE CLOG AND APRON RACE.

The race was held on the Broadwalk at 8.15 p.m., June 14th. Fortune was with us as a short spell of fine weather smiled upon the field of 16 runners, with as many spectators who had gathered for the event. Hind took the lead from Messenger, Dumont and Sales, with this order being maintained to the finish. We were fortunate in having Mr. Green, of Wisley, to present the prizes, two quarts of ale and two quarts of cider, to the winners.

The result was:—1st, H. Hind, 59 secs.; 2nd, G. Messenger, 60 secs.; 3rd, T. Dumont, 62 secs.; and 4th, J. Sales, 63 secs. The race was started by Mr. Rawlings, judged by Mr. Campbell, with Mr. Stenning as time-keeper.

At 5.15 p.m. on Wednesday, October 24th, 14 shivering athletes started the annual inter-departmental race round the Gardens, watched by some 20 spectators. The start was fast, due to the exuberance of R. Thomas and the pace was maintained to the halfway stage, several runners having attempted unsuccessful breakaways. Then T. Dumont began to move away from the field, closely followed by P. Dunn and G. Messenger. At the "Mound," T. Dumont had drawn clear and remained ahead to win comfortably by 60 yds. P. Dunn was 2nd, G. Messenger 3rd, and a sprint between R. Thomas and A. Vivian ended with Thomas taking fourth place.

#### *Result :—*

1st—T. Dumont, 14 mins. 24 secs. (Ferneries).

2nd—P. Dunn, 14 mins. 40 secs. (Temperate House).

3rd—G. Messenger, 14 mins. 45 secs. (Arboretum).

4th—R. Thomas, 15 mins. (Decorative Pits).

Team events—P. Dunn (2); G. Messenger (3).



Again Mr. W. M. Campbell was the judge with Mr. L. Stenning and Mr. S. A. Pearce as timekeepers, while Mr. S. Rawlings was the starter.

In conclusion I would like to express the appreciation of the Section to Mr. Campbell and to members of his staff, without whose interest and help these events would not have been the successes they were.

P. DUNN, *Section Secretary.*

### CRICKET SECTION, 1956.

In spite of one of the wettest summers on record, only one match had to be cancelled, and in only one other game did rain stop play. Thirteen matches were played, of which one was won, two drawn and ten lost. This looks a dismal record on paper, but in fact, many of the matches were extremely close and might easily have been won.

Our first two games were against a strong Ilford Parks team, who beat us by 38 runs at Ilford and by 43 runs on Kew Green. In the home match Messenger and Beyer scored 52 for the first wicket, after which came a remarkable collapse, the last 8 wickets falling in 30 minutes to give Ilford victory in the last over.

John Innes won a very close match at Bayfordbury by 6 runs and more convincingly on Kew Green by 8 wickets. In this match we batted first, our score at one time being 7 for 6 wickets. Only a last wicket stand of 25 took the score to 45, of which Messenger scored 37.

Rain robbed Oxford Parks Department of a deserved win on the Old Deer Park, Kew finishing 93 runs behind with 5 wickets standing. This was a new fixture for us and one which we hope to renew annually.

Richmond Nomads defeated us twice, by 7 wickets at home and later in the season by 61 runs.

Cambridge is never a happy hunting ground for us, and this year was no exception. We lost by 63 runs in spite of a fine 51 by Curry. The return match on Kew Green proved to be the most exciting for some years. Cambridge totalled 99 (Nicholson 5 for 22) and, in the last over of the game, Kew needed 9 runs to win with 4 wickets standing. In an incredible over we lost all four wickets, Cambridge winning by 8 runs.

Our solitary win was over the Old Kewites, whom we defeated by 7 wickets. Glazebrook played a fine innings of 49 out of the Kewites' total of 71. Of our total of 115, Messenger scored 35, James 22.

Two enjoyable games were played with the West Middlesex Hospital team. The first was lost by 18 runs (Haywood 29, Beyer 23), and in an even closer return match we were beaten by 9 runs, despite Curry's feat of taking 4 wickets in 4 balls.

Our match at Wisley resulted in a draw, after being played in cold and depressing weather. Kew managed to play out time in very bad light, scoring 64 for 7 in reply to Wisley's total of 100.

Our thanks are due to Messrs. Pearce and Stenning for their occasional help with umpiring and their continued interest in the Club.

G. W. MESSENGER, *Section Secretary*.

### LAWN TENNIS CLUB.

The season opened on May 5th, with a fine day and fair attendance. Unfortunately the weather during the rest of the season was poor, and play was possible on only 13 of the 23 Saturdays, whilst on Whit Monday and on August Bank Holiday no play was possible at all. This unsatisfactory weather helped to reduce the number of attendances, which were already low, owing to the membership having dropped sharply from 40 to 27, of which only 2 were Students.

Five matches were played, all on the Kew courts. Two were against Richmond Post Office, two against the British Museum (Natural History) and one against the Royal Horticultural Society's Gardens, Wisley. Kew won four out of the five matches. A return match against Wisley was unable to take place, having twice been cancelled owing to rain.

There were 11 competitors in the Men's Proudlock Cup Competition and 10 in the Ladies'. Mr. Bort beat Mr. Lewis in the final of the Men's, whilst Mrs. Milne-Redhead won the Ladies' in an excellent match against Mrs. Lewis, so that the holders remain the same as last year. The finals were held late in the season, but luckily the afternoon was fine.

The Club is grateful to Mr. Villick, who carried out the duties of Hon. Secretary, often under the most difficult conditions, and to Mr. Claiden, who continued to care for the finances. Miss Youngman proved a most able Hon. Assistant Secretary and, as usual, great support was received from the President, Dr. Bor.

The Annual General Meeting was held in November when the Director, Dr. G. Taylor, was elected President, Mr. Milne-Redhead Hon. Secretary and Mr. Claiden was re-elected Hon. Treasurer. Dr. Bor was in the Chair and was duly thanked for the way he has helped the Club during these last few years.

G. MILNE-REDHEAD, *Hon. Secretary*.

### PHOTOGRAPHIC SECTION.

This Section of the Club has continued to give much pleasure and interest to its members. The first meeting was in June. Mr. Atkinson delighted us with an illustrated lecture on "Picture Composition." October and November meetings were also

held. During these two occasions members were able to project their own slides, thus allowing for some very useful discussions.

N. C. HICKMAN, *Section Secretary*.

#### KEW METEOROLOGICAL NOTES, 1956.

The chief features of the weather of 1956 were a very cold February, long spring droughts and a very wet summer.

January was wet and fairly moderate in temperature until the 31st, when it dropped more than 20 degrees. Like several recent Februaries, that of 1956 was very cold, in fact it was severe. Between the 18th and 25th there were 168 hours of continuous air frost. The month was not as cold as February, 1947, January, 1940, or February, 1895, but on the 1st, with the maximum temperature of 24° F., Kew had its second coldest day within memory, the other being a day in February, 1895, when the thermometer failed to rise above 23 degrees.

The three spring months were dry, March and May exceptionally so, and these two months were also exceptionally sunny, May having no completely sunless day. April was cold, with 20 nights of ground frost at Wealdstone. It seems not to be generally realized that the early spring period is our dry season, and that frequently with the summer comes the monsoon, which however otherwise unwelcome keeps Britain green.

June was dull and cool, the thermometer not once reaching 80° F. This proved a foretaste of things to come, for July and August were cool and very rainy, the emphasis being on wetness in July and coolness in August. It was also a much more than usual thundery summer, but without any exceptional storm. Kew's July rainfall of 5.93 ins. was 274 per cent. of the average and was 1 in. more than the previous July record in 1880. During the night of the 8th-9th a series of thunderstorms gave Kew its heaviest day's rainfall since recording was begun in 1871. There was a severe and widespread gale on July 29th.

The dullness of the summer continued through September and the first third of the month was very wet. Frequently it seems that the predominant features of the summer's weather tend to continue through the following month. The thundery type was maintained, even into October. In spite of this, and that half its average monthly total fell on the 1st, Kew had its seventh successive October with below average rainfall. If it persists in this behaviour, October will be in danger of losing its reputation as the wettest of the months.

This dryness continued into November to such a degree that of the last 100 Novembers only that of 1945 was drier. Late in the month there was a cold spell, snow showers falling in places on the 29th. December was mild on the whole and ex-

tremely dull. A little snow came during Christmas-time, but it soon melted. There was little fog during November and December.

E. NELMES.

1956	Rainfall in Inches	Temperature		Grass Av.
		Maximum Av.	Minimum Av.	
January ...	3.65	44.2°	34.3°	33.2°
February ...	.32	36.8°	28.8°	26.8°
March ...	.93	52.9°	40.3°	36.7°
April ...	1.00	54.7°	37.9°	35.9°
May ...	.18	67.5°	47.6°	45.3°
June ...	1.76	65.6°	52.2°	49.4°
July ...	5.92	70.7°	59.0°	56.0°
August ...	3.80	66.4°	55.5°	52.9°
September ...	1.82	67.6°	58.6°	55.8°
October ...	2.15	57.9°	48.3°	45.5°
November ...	.37	49.6°	44.5°	42.8°
December ...	2.56	47.3°	44.0°	40.5°
<hr/> 24.46 <hr/>				

### KEWITES AS AUTHORS

The following books by Kewites were published during 1956.

Stella Ross-Craig—"Drawings of British Plants." Part IX (2). London: Bell. 1956. 8s. 6d.

Hooker's *Icones Plantarum*. Edited by Sir E. J. Salisbury. Ser. 5, Vol. VI. Parts 2 and 3. Oxford: Blackwell. 1956. 20s. each part.

"Flora of Tropical East Africa." Edited by W. B. Turrill and E. Milne-Redhead. London: Crown Agents. 1956.

April [1] Connaraceae, 3s.

April [2] Canellaceae, 1s.

May [3] Caryophyllaceae, 3s.

October [4] Menispermaceae, 3s.

October [5] Rhizophoraceae, 2s. 6d.

Curtis's *Botanical Magazine*. Edited by W. B. Turrill. London: R. Horticultural Society. 1956. Vol. 171. Parts 1 and 2. 21s. each part.

Wilfred G. Sheat—"Standard Garden Practice for Southern Africa." Cape Town: Maskew Miller. 1956.

W. J. C. Lawrence—"Soil Sterilisation." London: George Allen & Unwin, Ltd. 18s.

H. S. MARSHALL, *Librarian*.

# POSITIONS TAKEN BY STUDENTS ON LEAVING KEW DURING 1956

Alphonso, A. G.....	Botanic Gardens, Singapore.
Ast, R.....	St. Andreas, Cham/ZG, Switzerland.
Baylis, C. L.....	Messrs. Clifton Nurseries, Warwick Avenue, W.9.
Boot, W. A.....	Noord Crailoseweg 16, Huizen (NH), Post Bussum, Holland.
Boulton, J. B.....	Student, Worcester Training College.
Elton, T.....	Oil Refineries, Isle of Grain, Kent.
Fugard, R. L.....	73, 3rd Avenue, Newton Park, Port Elizabeth, S. Africa.
Godley, P. G.....	Beckenham Parks Department.
Goodale, A. E. R.....	Propagator, Hammersmith Parks Dept.
Harvey, T. D.....	Supervisor, Murphy Chemical Co., Research & Trial Grounds, St. Albans.
Hind, H.....	Student, Inst. of Parks Admin. School of Training, The Grotto.
Hopkins, Miss A.....	18, Park Road, Radlett, Herts.
Jordan, J.....	Propagator, Ealing Parks Dept.
Kemish, G.....	Propagator, Enfield Parks Dept.
Rogers, W. M.....	Bournemouth Parks Dept.
Rippon, A. V.	
Pringle, D. J.....	Parks Dept., Nairobi.
Muller, T.....	Gemeindestrasse 4, Zurich 7/32, Switzerland.
Moore, D. J.....	Dept. of Agriculture, Paget East, Bermuda.
Scott, H. A.....	Foreman, Chelmsford Parks & Gardens Dept.
Tyte, J. S.....	Bristol Parks Dept.
Vickers, F.....	Constructional Foreman, Salford Parks Dept.
Wyatt, P. C.....	8, College Road, Histon, Cambs.

## WEDDING BELLS

Miss Pat Lewis to Mr. H. Arthur George at St. John's Church, Walthamstow on January 21st, 1956.

Mr. S. D. Hitt to Miss Iris K. Bewley at St. Anne's Church, Kew on February 4th, 1956.

Miss Joan Elfers to Mr. Kenneth W. Munday at South Ealing Registry Office on March 3rd, 1956.

Miss Nancy B. Rymer to Mr. R. S. Holcroft at Park Street Unitarian Church, Hull, Yorkshire on May 12th, 1956.

Mr. J. S. Tyte to Miss Doreen Winter at Filton Parish Church on August 25th.

Miss Patricia J. Cross to Mr. R. Ast at the English Church, Lucerne on September 15th, 1956.

Mr. Thomas D. Harvey to Miss Gillian Phyllis at the Parish Church of Walton, Felixstowe, Suffolk on November 10th, 1956.

## NOTES AND GLEANINGS

Congratulations to Messrs. A. P. Paterson, D. Sales and T. F. Harvey ; they have contributed to the long list of N.D.H. successes which have been gained by Kewites in the past, by passing the Intermediate Examination while Student Gardeners. Student Gardener T. F. Ridley also passed the Intermediate in 1956 before entering Kew in October. We wish them good progress in the Final. We also congratulate Mr. A. S. Jones. He has passed the City of Worcester Training College Examination with two credits.

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We are proud to record that three more Kewites have been awarded the Victoria Medal of Honour. The award was made to Dr. George Taylor, our new Director in 1955, while he was Keeper of Botany, British Museum. In 1956 the award was made to Mr. J. S. L. Gilmour, Director of the University Botanic Garden, Cambridge ; and to Dr. W. B. Turrill, Keeper of the Herbarium, Kew.

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Dr. W. B. Turrill has been elected an Honorary Member of the Botanical Society of the British Isles on account of his distinguished services to British botany and to the Society. He has also been appointed a member of the Council of the British Association for the Advancement of Science.

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Our congratulations go out to Mr. A. W. C. Anderson. The Royal Institute of Horticulture of New Zealand has awarded him with an Association of Honour. Mr. Anderson, who left Kew in 1926, has been Superintendent of Parks and Reserves, Timaru, since 1934.

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Mr. N. Y. Sandwith has been elected a Vice-President of the Botanical Society of the British Isles. Also Mr. F. Ballard is the elected President of the Richmond Scientific Society. Dr. R. C. Metcalfe has been elected Botanical Secretary of the Linnaean Society.

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Mr. H. E. Downer, who left Kew in 1912 retired from the post of Superintendent of the Vasser College grounds in 1952. He was honoured by the Federated Garden Clubs of New York State at its 31st Annual Meeting and Luncheon on March 15th, 1956. A Silver Medal was presented to Mr. Downer for " his outstanding contributions in horticulture, both to the students at Vasser College and legion of garden club members ". Mr. Downer spent seven years as horticulturist at Smith College, Northampton, Mass., before going to Vasser College in 1921. We wish him a happy retirement.

We congratulate Mr. J. R. Sealy, of the Herbarium, on his promotion to the rank of Principal Scientific Officer.

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Congratulations are extended to Miss S. S. Hooper who has been promoted to the rank of Experimental Officer. Also to Mr. F. Richardson on his promotion to Experimental Officer in the Jodrell Laboratory and to Mr. J. Kennedy-O'Byrne who has been promoted to Experimental Officer in the Herbarium.

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We welcome Dr. D. Dally who has joined the Herbarium Staff as Bryologist.

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Mr. J. H. Hemsley has joined the staff of the Nature Conservancy and is stationed at the Furzebrook Research Station, near Wareham, Dorset.

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Miss D. M. Jepson was appointed Assistant Librarian in the Herbarium Library in August, 1956. Miss Jepson is the daughter of Dr. W. B. Jepson of Kew, who resided near the Cumberland Gate until his house was bombed. Miss B. A. Borrás has resigned from her post as Assistant Librarian, and is now at Salisbury, Southern Rhodesia.

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We are pleased to note the appointment of Mr. Truman Fossum as a member of the staff administering the account of the Florists' Telegraph Delivery Association for Grant Advertising, Inc., New York. Although he has resigned his position as an agricultural economist with the Department of Agriculture, he will continue his statistical, marketing and related economic research for florists and nurserymen. Mr. Fossum is the only person who has been honoured with the national research awards of both florists and nurserymen. In 1953 the Foundation for Floriculture presented him with its Award for Outstanding Research, and in 1954 the American Association of Nurserymen presented him with the Norman Jay Colman Award.

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Mr. Howard W. Swift has joined the staff of New York Botanical Garden in which he is Assistant to the Curator of Education and Horticulturist, Mr. T. H. Everett. Since leaving Kew in 1937, Mr. Swift has been engaged in the seed business both in Australia and in the United States of America.

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We are pleased to note the appointment of Mr. J. H. Jones as Horticulturist to the Department of Agriculture, Bermuda.

Mr. W. N. G. Gilmour has been appointed to the post of Assistant Superintendent of Parks, Torquay Parks Department. Mr. Gilmour left Kew in 1952.

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Mr. G. Scott has moved from Bermuda, where he served with the Department of Agriculture, to the Morton Arboretum. Once again a Kewite has proved himself to be versatile, for to quote from a letter which we received from Mr. Scott recently:—"my work is very interesting and varied and consists of trying to be two people at once, a horticulturist and a public relations officer".

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Mr. A. Woodward was appointed Parks Superintendent of Richmond in July, 1956. He was formerly Deputy Superintendent at Richmond.

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Mr. P. Tebby who left Kew in 1953 has moved to Richmond following the above appointment and is now Deputy Parks and Allotments Superintendent.

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Mr. R. A. Bee, who was Head Gardener at Bedford College, Regents Park, was appointed as Technical Assistant to the Parks Department, Bournemouth Corporation, in September, 1956.

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After attending the course in Parks Administration at "The Grotto" Mr. G. Crowder was appointed Technical Assistant at Ealing Parks Department in August, 1956.

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Mr. J. E. Gibbons has been in charge of the Botanical and British Flora Collections for the past two years at Calderstones Park, Liverpool. He is a Supervisory Gardener, equivalent to Foreman. He left Kew in 1953 to become a First Class Propagator in Victoria Park, Liverpool.

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Mr. J. Douglas formerly Curator of the Botanic Gardens, Glasgow, and previously Park Superintendent at Clacton-on-Sea was appointed to the post of Superintendent of Parks, Renfrew in May, 1956. During his years as Curator in charge of the Botanic Gardens, Glasgow, the collections improved considerably and visitors spoke most highly of the standard of maintenance.

\* \* \*

Mr. A. F. Baker has retired from the post of Superintendent of Parks at Bloemfontein, South Africa, and is returning to England. Mr. and Mrs. Baker intend to settle either in Devon or in Surrey. We wish them a long and happy retirement.



Mr. H. M. Blanche retired in 1955 from his long service as Chief Forester of the Finger Lakes State Parks of New York. We are all aware of the good work he has done in this department and we wish him a happy retirement. He left Kew in 1909.

\* \* \*

Mr. F. G. Walsingham has retired to Buckinghamshire after holding the important post of Superintendent of the Harvard University Gardens in Cienfuegas since 1932. Mr. Walsingham left Kew in 1913. We wish him a very happy retirement.

\* \* \*

On the evening of March 13th, 1956, the St. Louis Horticultural Society sponsored a dinner to celebrate George H. Pring's 50 years' association with the Missouri Botanical Garden of which he is Superintendent. Over 400 guests were present. The leading horticultural societies made presentations in the form of money and government bonds given in the hope that Mr. and Mrs. Pring would use the proceeds to finance a trip to the Second World Orchid Conference to be held in Hawaii in 1957. We are also pleased to report that on October 23rd, 1956, Mr. Pring received the Annual Citation from the American Horticultural Council in recognition of 50 years in horticulture and breeding of orchids and water lilies. It was presented at the Annual Meeting and Banquet at the University of Michigan. We are indeed proud of Mr. Pring's fine record.

\* \* \*

In April, Dr. W. B. Turrill gave a series of lectures in Yugoslavia for the British Council and U.N.E.S.C.O. He visited parts of Serbia, Macedonia, Bosnia, Hercegovina and Croatia and lectured to the staff and students of four universities. In addition he was able to make botanical tours in various mountain and hill districts, to discuss botanical researches and to inspect botanic gardens.

\* \* \*

Mr. D. A. Reid represented Kew at the First European Mycological Congress which was held in Brussels from September 15th-22nd, 1956. He returned with a number of interesting specimens which have been incorporated in the Herbarium. It is hoped to hold a similar congress every four years.

\* \* \*

Mr. W. G. Sheat, the Director of Parks, Johannesburg, has been granted special leave in order to attend the International Congress on Park Administration to be held in London during May, 1957.

\* \* \*

Mr. Ian Wilkinson, who left Kew in September, 1956, finds life on the Rubana Rubber Estate, Malaya, varied and interesting. His work includes the control of the flood waters of the Lower Perak River, supervision of tapping and other field work, rubber

shipping and a weekly pay parade which takes three to four hours and "is quite a job".

\* \* \*

Mr. L. L. Forman of the Herbarium Staff is still at Bogor in Indonesia. In a letter received in October last he mentions that he has made interesting trips to the N.E. Celches (Minahassa) and to E. Borneo, up the Mahakam River, when he stayed for some time with Dyaks in a long-house. We were glad to learn that he did not contribute to the bunch of human skulls hanging outside the long-house door. He hopes to return to Kew in the Spring of 1957.

\* \* \*

The official journal of the Institute of Park Administration, S. Africa, has Major F. R. Long as its editor.

\* \* \*

In his Presidential Address at the Annual General Meeting of the Institute of Park Administration, South Africa, Mr. J. E. Repton offered some very sound advice to the younger men of the profession. His statement "that a successful Director of Parks and Recreation must be a keen horticulturist as well as a good business man and administrator and a keen recreationist" will find full support in this country. He favoured the establishment of Post Apprenticeship Training, drawing attention to the fact that "nowhere in the Union is provision made for a General Course in Horticulture to enable the students to obtain knowledge in all the important phases of Horticulture and Recreation, with particular emphasis on Administration".

The importance which he attaches to administrative tuition is interesting.

\* \* \*

We extend our sympathy to Mr. L. B. Creasey of Cape Town Public Gardens over the death of his wife on December 17th, 1956. Mr. Creasey is Secretary of the newly-formed Western Province Branch of the Institute of Park Administration, South Africa.

\* \* \*

A link with the past and with the days of Sir Joseph Hooker, who was director of Kew, 1865-85, has been severed by the death of Mr. H. N. Ridley, C.M.G., F.R.S. His most important work was concerned with rubber but he also sent a large number of living plants and dried herbarium specimens to Kew from the forests of Malaya. On retirement, Mr. Ridley lived at Kew. He enjoyed watching birds in the grounds of Queen's Cottage, and expressed a wish that his ashes should be scattered there. A young oak has been planted in his memory in this area. He died in his 101st year on October 24th, 1956.

It is fitting to think of the late Mr. J. C. van Balen as the organiser of the "First South African Kew Dinner", which was held in Johannesburg in 1952. On this occasion the following Kewites attended:—Messrs. F. R. Long, A. F. Baker, J. C. van Balen, H. M. Holloway, T. A. Arnold, A. F. Gunn, L. N. Prosser, P. W. Page, J. J. Aves and W. G. Sheat. They were able to welcome as their guest none other than the Director, Sir Ed. J. Salisbury, who was visiting the City to attend a scientific conference. We thank you for news of this, Major Long.

### GARDEN NEWS

The attendance during 1956 was the lowest for many years with 987,835 visitors. Whit Monday was the highest with 48,550 visitors.

The weather no doubt accounted for the low attendance. The hoses and irrigation lines which were brought into use in early April, owing to the dry winter of 1955/56, were laid to one side as the wet summer developed. The long struggle against weeds and grass extended through the autumn even into December. The extremely cold weather experienced throughout February resulted in severe damage to the bedded wallflowers. Recently planted specimens of *Eucalyptus niphophila* and *E. alpina* escaped with only slight damage and thus live to enjoy the milder winter of 1956/57. The mild, practically fog-free weather during December gave such sensitive plants as *Reinwardtia trigyna* an opportunity to flower to perfection.

Among the interesting plants which flowered during the season were *Helwingia japonica*, *Magnolia macrophylla* and *Liparia sphaerica*, a South African leguminous shrub. A fine group of *Lilium Parryi* graced the walk by Cumberland Gate. *Decaisnea fargesii* produced a number of its unusual fruits. *Nuttallia cerasiiformis* also fruited as a result of hand pollination from the male clump near the Ferneries. Among the several new varieties in the Rose Garden was the shapely *Grace de Monaco*.

The extensive glasshouse repairs and renovations continue to disorganise the Palm House and T-Range. For the first time for many years *Victoria Amazonica* was not grown in No. 10. Many of the valuable specimens in the central portion of the Palm House were tubbed during the summer and autumn in order to clear the central portion. Only two palms remain. Being too tall for removal they have been tilted to allow for the construction of a board roof across the complete section. No. 5, the Succulent House, has been completely renewed in aluminium alloy. The large specimen Agaves have made the return journey from the Temperate House and the grouping of the remainder of the collection is well in hand. Some of the smaller growing houses have also been renewed.

A large-scale removal of soil has been made from the north-eastern point of the Rock Garden. This area was badly affected

with *Equisetum*. The excavated soil has been used to make up the banks on the eastern tip of the lake.

The larger mature Beeches are an important feature of the more wooded parts of the gardens. The losses among them during recent years have been heavy, but there are indications that the rate of felling will be reduced now that the most dangerous ones have been removed. In the area west of Holly Walk to the River, 198 mature Beeches still stand to give depth and character to the "summer's wonderland". As a point of interest the total spread of these mature trees covers an area of approximately 15 acres. The future of the Beech as an important feature is also assured, for in the same area there are 108 young Beeches of varying ages to take the place of the older ones as the time arrives. The severe gales of July 29th caused one large Beech and several smaller trees to be blown down completely while over 60 large limbs were lost, mostly from Beeches. However, the damage was light for an area the size of Kew.

During 1956 the following plants were exhibited at the R.H.S. and received awards : —

*Award of Merit* : *Eranthemum pulchellum*, *Cyclamen coum*, *Hosta elata*, *Catalpa speciosa*, *Ruellia graecizans*, *Eucomis comosa*, *Muscari latifolium*, *Malus florentina*, *Deutzia scabra* var. *staphyleoides*, *Iris graebneriana*, *Anthyllis montana* var. *rubra*.

*Botanical Certificate* : *Ruttya fruticosa*.

*Certificate of Cultural Commendation* : *Liparia sphaerica*, *Eucomis comosa*, *Musschia Wollastonii*, *Cyclamen coum* var. *album*, *Bearsavola Perrinii*.

*Certificate of Preliminary Commendation* : *Petronymphe decora*.

\* \* \*

All will remember the Queen's Beasts which guarded the Abbey Annex during the Coronation and the festivities which followed. They were created by the great sculptor and Royal Academician, Mr. James Woodford, O.B.E. Mr. H. Stanford London, F.S.A., Norfolk Herald Extraordinary, who is an expert on heraldic designs and crests, gave invaluable guidance upon their selection and features. Through the generosity of an anonymous donor, replicas of these 10 heraldic animals, created by Mr. Woodford, stand guard over the Palmhouse and gaze defiantly across the Pond at No. 1 Museum.

\* \* \*

The following "news item" appeared in one of the local papers just before Christmas, 1956.

"On Christmas Day Kew Gardens will be closed, the only day of the year it shuts its gates to the public. All staff except those who feed the fish and animals will be on holiday. The Gardens

remain open all through the winter even though visitors rarely number more than a dozen a day."

After reading Mr. Macdonald's "fantasy" we can imagine that the "chubby Lithops cuddled together even more closely" as they contemplated the day when their faithful attendant, the duty man, concerned himself solely with "the fish and animals".

\* \* \*

Workers who were thinning out the Water Lilies in the Lily Pond last summer, suffered severely from a rash which occurred on the parts of the arms which were submerged. Subsequent investigations led us to suspect flukes in their larval stage. They have a complicated life history which involves various water-fowl and the Great Pond Snail (*Limnaea stagnalis*). They were apparently swarming from the latter when the attacks occurred. One person had later to undergo a course of penicillin injections in order to counteract a poisoned arm through the rash.

\* \* \*

At the R.H.S. Fortnightly Show, February 14th and 15th. 1956, two exhibits were staged by Kew. The larger one contained specimen glasshouse plants including *Senecio grandiflorus*, *Myrtus bullata*, and *Boronia megastigma*. The other exhibit consisted of Begonias and included *Begonia manicata* and *B. Rex* var. Fire Flash.

\* \* \*

During early June the Gardens and Herbarium were featured in a programme arranged by the Independent Television Company. Masses of equipment were assembled in the Melon Yard but, as zero hour approached, it rained very heavily and this continued throughout the tour which the cameras made in the Duke's Garden vicinity. The Director, Dr. Turrill, Mr. Campbell and Mr. Stenning took part. Mr. Meikle appeared in the television programme "What's My Line?", and he beat the panel!

## HERBARIUM LECTURES

After an unfortunate break in this series last winter, due to structural alterations in the old Mounters' Hut, these illustrated lectures started again last autumn in the new extension and, as before, have proved very successful and popular amongst all sections of the staff, as well as their families and friends.

Mr. D. E. Symon, Waite Agricultural Research Institute, Adelaide, gave an account of the expedition he accompanied in South and Central Australia. Starting from Adelaide and journeying northwards, the sequence of photographs showed the contrasts in seasonal vegetation in the Flinders Range, plants of the stony deserts in the Cooper Pedy district and the fixed dunes (*Triodia*, *Casuarina* and *Acacia*) near Sundown on the Northern Territory

border. Further north, in the central region of the Northern Territory, some very fine examples of ghost gums, *Eucalyptus papuanus*, were seen in the plains and valleys of the Harts Range, narrow gorges and rock formations in Palm Valley in the Krichouf Range, views of Mts. Olga and Connor and, in particular, the striking features of Ayer's Rock—an isolated boulder mass with smooth and rounded contours up to 1,000 ft. high, devoid of all cover except lichen and moss, with fine examples of aboriginal rock painting in the old dwelling caves at the base. Finally, a series of aerial photographs were shown of the country south of Oodnadatta in the vicinity of Lake Eyre.

Mr. E. Milne-Redhead, Kew, gave two talks on the "Colonial Office Botanical Expedition to Southern Tanganyika" which were well illustrated by the colour photographs taken by his companion, Mr. P. Taylor. The first talk covered the journey from Nairobi via the Tanganyika coast to Songea, with views of the scenery, woodland vegetation and flora around Songea. In the second talk, the vegetation and plants of wet habitats, rocky ground and cultivated land in the Songea area were shown, followed by visits to the Matengo Hills, Mbamba Bay on Lake Nyasa and a week-end by air to Mbeya.

Mr. F. H. Hill spoke about the flora of the so-called "desert" (sandy ridge and Mulga heath) region of the Woomera Rocket Range. An excellent series of slides were shown of the plants in their natural habitats with attractive close-ups of the flowers.

Dr. A. Melderis, British Museum of Natural History, gave many of his audience their first glimpse of Greenland with the colour photographs taken on his trip to the Danish Arctic Research Station at Gothavn on Disco Island, from where explorations were made around the fjords along the west coast. The scenery and flora were shown in sequence of the seasonal changes from the snow and ice-bound conditions during the long winter months, the melting and gradual recession of the snow, to the appearance of the spring and summer flowers, adding bright splashes of colour and attractive collecting finds in a barren and rugged landscape.

J. KENNEDY-O'BYRNE.

### NOCTURNE—A KEW FANTASIA.

It is night. A supine moon is scantily clad by mischievous clouds. Beneath it the Royal Botanic Gardens lies peacefully sleeping, its gates of Debussian filigree closed for a few hours against the human species.

Within, the Doric dignity of No. 1 enshrines a sinister jungle of striving, strangulating *Monstera*s and *Philodendron*s; a silent but potent struggle for existence, broken only by sporadic drips and an occasional stealthy rustle of impatient foliage and pregnant meristem.

Just an owl's hoot away, the romantic verdure of Nos. 2 and 3 hints at some great carboniferous epoch, with fronds circinnately

unrolling with Mozartian grace. In the "chapel," flanked by two incense-burning braziers, gleams a gigantic golden Buddha, its lips whispering softly the Four Noble Truths and the Eightfold Path.

Through the glass can be seen the polychromatic pretties of No. 4, in jostling competition for the loudest applause, knowing that they exist but to please the eye and nose.

Nearby, gleaming in the moonlight, a symphony in aluminium, lay the new No. 5, heaving gently at its moorings, awaiting its long-expected launching.

Across the way, the cacti in the Sherman-Hoyt House stretch forth vainly their spiny arms in speechless supplication for their native sun-kissed lands, while their more rotund brethren mournfully lick the wounds inflicted on them by the human invasion of the previous day.

Chubby Lithops, cheated out of their South African spring, cuddle together more closely as they contemplate the English winter, their fenestrate cells forlorn and famished.

Deep in the depths of the T-Range, the *Nepenthes* whisper together, recalling obscene, carnal orgies, while orchids vie with each other in planning creations in "haute couture."

Further afield, the majestic Palm House, like the capsized hull of some great ocean liner, rears skyward its stupendous mass—a rhapsody in glass and iron, epitome of Victorian pomp and circumstance. Flanking its massive hull, in attitude rampant, rear the Queen's Beasts, grotesque and heraldic in their medieval pageantry, patterns of an ancient aristocracy, defying with haughty grandeur the march of modern mediocrity.

Through glades and vistas the moon-kissed stones of a classic temple are discerned. In the portico pose statues in graceful nonchalance and Hellenic harmony. Satyrs and nymphs, dedicated to Priapus, God of Gardens, flit hither and thither, pausing only to look with puzzled amusement at the fig-leaves, emblems of Victorian obscenity.

From the Himalayan fastnesses of the Temperate House, come cold showers of rationality and commonsense, evicting all enchantment and dissolving all dreams.

Yet, through the length and breadth of this vast domain of Flora, the power potential in every growing cell throbs in mystic ritual, proclaiming the ancient Truth—Though the Forms are many and varied, the Life is One.

E. W. MACDONALD.

#### TRAINING AT HORTICULTURAL INSTITUTES.

As outlined by the Loveday, reports, 1948-9, on the provision of Agricultural and Horticultural Education, several Institutes were to be set up to provide facilities for Horticultural Education alone. These Institutes were to be set up on a Regional and National basis rather than on a county basis. In addition the Horticultural Education was to be provided separately from the existing Farm Institutes. Certain Institutes, however, were to continue to

provide both Horticultural and Agricultural Training. These were Askam Bryant, Cannington, Haughall, Usk, Oaklands (St. Albans), and Hutton. New Institutes were to be set up in the Evesham, Wisbech and Flint areas and the existing Institute at Swanley extended. The Institutes at Pershore and Flint have recently been opened.

It is usually recommended that the potential student should have passed or reached the standard of the General Certificate of Education. In addition to the scholastic standard a student is required to have had at least one year's practical training on an approved holding. This ensures a foundation of practical experience.

Both sexes are admitted to most Institutes. Many students are assisted by scholarships from their Local Education Authorities, these being granted according to the parent's income. "Out County" students may be charged full fees, but the student's Local Education Authority may assist, provided that similar instruction cannot be obtained within the county. The Ministry of Agriculture also provides many scholarships, although these are mainly intended for the children of people working on the land.

During training the emphasis is on craftsmanship. The manual skills, which are systematically dealt with, may be divided into three categories; firstly, those which are relatively simple, e.g., digging or the use of simple machinery; secondly, the more specialised ones such as pruning, spraying and grafting; and thirdly, the recently introduced skills which are based upon new practices.

The arrangement of the courses at Institutes provides as much practice as can be arranged in the limited time available, the lectures being continually supplemented by practical work. The basic tasks are demonstrated and are followed by practice periods under the supervision of the lecturers.

At many Institutes the students carry out the bulk of the routine work. This means practical work not only during the day, but in the early morning and at the week-ends, with such duties as stoking, ventilation and watering. This ensures that they do have some idea of the work involved in the running of a horticultural establishment.

The scientific side is not neglected, and the instruction in the laboratories is designed to help the students to combine theory with practice. Thus the student is provided with an elementary knowledge of Botany, Plant Pathology and Soil Science. This is essential as more and more use is being made of scientific discoveries in horticulture. Visual aids are often used in conjunction with the lectures, but individual effort is encouraged by the student taking his own notes. He is instructed in the art of making notes, and upon methods of remembering details. Each Institute has a library and its use is encouraged. This enables the students to learn how to use books for their own benefit and, possibly of



equal value, introduces them to works which will enable them to stock their own bookshelves with discrimination. Usually the leading horticultural journals are taken so that current knowledge and practices can readily be referred to.

One piece of self help that does seem to be common to all the Institutes is the keeping of a Practical Diary. This the student is encouraged to do with helpful supervision, but it is intended that it should be a personal account of the student's work and observations. Many old students claim that their diaries were more than worth the course without anything else. They often contain the scraps of information which are seldom forthcoming from text books and are usually found out only by bitter experience.

As part of the training, organised visits are made to top-ranking growers, research stations and other horticultural establishments. Extra evening lectures by visiting specialists are also included.

The courses enable students to sit for the National Certificate of Horticulture. This examination, which is organised by the Royal Horticultural Society, is only open to people who have trained at Institutes. A full day's practical examination is included. Students who intend going on to the N.D.H. find it very useful as the external examiners are often N.D.H. examiners, too. There is a general section and, in addition, specialised sections in fruit, vegetable and glasshouse cropping, which be taken once the general section has been passed.

Finally there is the social aspect of Institute Training. To many students it offers the first real taste of community life. As the courses are residential, the recreational side of student life is not neglected. There are opportunities for organised sport and for social events. Socials and Dances are often held in conjunction with other types of training centres. Such activities as Photographic Clubs, Debating Societies and Christian Unions are also organised by the students themselves.

This is a brief outline of Institute life. It involves plenty of hard work and study, but in company with others, all of whom have one common interest. Such a course opens the gateway and shows the possibilities to the young person entering horticulture to-day.

L. PEMBERTON.

## MEMOIRS OF AN 81-YEAR-OLD KEWITE.

My horticultural career began in 1890 with Messrs. J. Backhouse & Son, of York, where I was employed in the propagation department. Three years later I entered the Cambridge Botanic Gardens, where the late Mr. Geo. Lamb was my foreman. On my entry into Kew as a Student my first department was the Flower Garden, and my first task was to plant up the carpet bedding. The display was to be based on the design of a lace-curtain hanging in the drawing-room of the late Duchess of Cam-

bridge. When the first section was completed it was inspected by the Director, Sir William Thistleton-Dyer. To my relief his verdict was, "Splendid. Carry on." Mr. Garrett, the foreman, said afterwards, "There is a feather in your hat! More often than not we have to change it." As foreman I later moved to the Temperate House Pits and finally the Ferneries.

One of the most outstanding events during my stay at Kew was on the cricket field. Mr. Watson, the Assistant Curator, suggested a match among the Students, "Northerners versus Southerners." Mr. Watson, the captain, and myself were the only members of the regular eleven who played for the North. The South, on the other hand, had nine players from the Club Eleven. The odds seemed against us. Mr. Watson and myself opened the innings, but unfortunately he was bowled for a "duck" by the second ball. Mr. Frankland, of Halifax, a left-hander, was the next bat, and he hit the top score of twenty-seven runs. The remaining nine players produced a succession of "ducks," and our innings finished with only fifty-one runs on the scoreboard. The amusing part was to follow; after the standard boast of "letting us score a few runs for encouragement," the Southerners reached a total of only twenty-one runs. My bowling seemed unusually accurate for I took nine wickets for four runs, all clean bowled. Mr. Nicholson, the Curator, and Mr. Watson shook my hand vigorously with the remark, "You will soon be playing at the Oval."

On leaving Kew I took up the appointment of Propagator to the Durban Botanic Gardens, but not without a good-bye from the Students, who had engaged a room at the Rose and Crown, Kew Green, to give me a farewell party. I still correspond with one who attended that party, Mr. W. A. Warry, of Guernsey. A marked contrast to this informal send off from Kew was the guard of honour, composed of the native staff, which was arranged for me when I arrived at the Botanic Gardens, Durban, and was met by the Director, Mr. Wood.

The Gardens are situated on the Berea, a hill overlooking Durban. They were laid out with beds of palm trees intermingled with such plants as Eucalyptus, Poincianas and Jacarandas. Bougainvilleas in variety were climbing over trees to hang in festoons thirty to sixty feet in length. The large beds of Crotons and Dracaenas were colourful with Euphorbia splendens as edging. Our work included the raising and distribution of ten thousand grafted Citrus each year.

Returning to England after three years' service in Durban, I became Deputy Superintendent of Stampford Park, Stalybridge and Ashton-under-Lyme. This was followed by an appointment to the post of Superintendent at Pye Hayes Park, Birmingham. This was the largest park of that city, with the beds and borders sited to display colour schemes to the best advantage. Free use was made of such dot plants as Bougainvilleas in variety, Swain-

sonia galegiefolia, Streptosolen Jamesoni and Plumbago capense with its variety alba. These were grown about three feet high, being trained over wire umbrellas. One magnificent display was provided by eight massive spikes of Yucca filamentosa var. grandiflora in one border, with an interplanting of Abutilon Thompsoni and Calceolaria amplexicaulis. On another occasion a massed planting of a thousand Delphiniums and seven hundred Meconopsis betonicifolia plants in the one border proved very effective.

Ideas on bedding have now changed and such masses of these more unusual plants are seldom seen. However, it is nice to see these old favourites occasionally and to think back on past bedding schemes. Fortunately, although I am an invalid, I am still able to make my way round the garden and to plan for future displays with my wife, who is also a keen gardener. W. THORPE.

## THE WILD BIRDS OF KEW GARDENS.

### II.—THE PRESENT WILD BIRD POPULATION.

In a previous note\* reference was made to some of the changes which have occurred in the bird fauna of Kew over a period of more than half a century. More must be now said about the species which may now be seen here. There are, of course, seasonal changes in the bird population, and slight differences in the records from year to year, so to give a fair picture of the present situation, records for the five-year period, 1952-1956 inclusive, have been examined and are summarised in the present note. Records for the years 1952-1954 have already been published.† For the years 1955 and 1956, I have used personal records and unpublished information obligingly supplied by the Official Observer, Dr. J. W. Landells.

It is convenient to divide the species recorded into four groups.

#### 1. *Residents.*

The species here listed are present throughout the year, or at least believed to be so, though in some cases owing to seasonal movements the same individuals do not necessarily remain. All in this group, except the Lesser Spotted Woodpecker (quite the rarest of them), are known to have bred within the Gardens during the 5-year period, most of them being regular breeders. In this and subsequent lists the Wetmore classification is followed.

Mallard.  
Tufted Duck.  
Pheasant.  
Moorhen.  
Coot.  
Stock Dove.

Nuthatch.  
Tree Creeper.  
Wren.  
Mistle Thrush.  
Song Thrush.  
Blackbird.

Wood Pigeon.  
 Tawny Owl.  
 Green Woodpecker.  
 Great Spotted Woodpecker.  
 Lesser Spotted Woodpecker.  
 Carrion Crow.  
 Jay.  
 Great Tit.  
 Blue Tit.  
 Coal Tit.

Robin.  
 Goldcrest.  
 Hedge Sparrow.  
 Pied Wagtail.  
 Starling.  
 Hawfinch.  
 Greenfinch.  
 Bullfinch.  
 Chaffinch.  
 House Sparrow.

To these may be added the London Pigeon (a feral Rock Dove), which breeds in the Shaft Yard Water-Tower, but does not appear in the official records.

## 2. *Summer Visitors.*

These are mainly insect-eating species which breed in this country, but move south when their food supply decreases in autumn. Those marked \* have bred at Kew during the five-year period.

Common Sandpiper.  
 \*Cuckoo.  
 Swift.  
 Swallow.  
 House Martin.  
 Sand Martin.  
 Wheatear.  
 Common Redstart.  
 Sedge Warbler.

\*Blackcap.  
 Garden Warbler.  
 \*Whitethroat.  
 Lesser Whitethroat.  
 \*Willow Warbler.  
 \*Chiffchaff.  
 Wood Warbler.  
 Spotted Flycatcher.  
 Pied Flycatcher.

While some of these are common summer birds locally others, such as the Sand Martin, Wheatear and Pied Flycatcher, have been observed only occasionally (the last-named only once) in the course of their migration. The Common Sandpiper, which differs from the others in its habitat and food, is often seen along the river, but was observed in flight across the Pond in August, 1956.

## 3. *Winter Visitors.*

None of this group breeds locally. They are seen at Kew only in the winter months and move north in spring to breed in Northern England and Scotland (e.g., Goosander, Siskin), or mainly in northern or arctic Europe (e.g., Smew, Brambling). They form three sub-groups; the Ducks, which occur mainly on the river, though the Goldeneye has been seen on both the Pond and the Lake; the Thrushes, which favour berry-bearing shrubs and also feed on the ground, and the Finches, which are attracted by dry tree seed such as beech mast and birch and alder seed.

Goldeneye.  
 Red-breasted Merganser.  
 Goosander.  
 Smew.

Fieldfare.  
 Redwing.  
 Siskin.  
 Brambling.

#### 4. *Other Species.*

Here we have a very mixed collection, the only feature they share being their failure to fit any of the preceding groups. They do not fall into any clearly defined groups within themselves in respect of abundance or seasonal occurrence, though varying very much in these respects. Some may be seen on any day of the year, though not resident, e.g., Heron, Mute Swan, Black-headed Gull; others, common enough in open country, are seldom seen here, e.g., Lapwing, Skylark, Rook, Magpie; several are usually winter visitors so far as Kew is concerned, though remaining to breed in Southern England, e.g., Woodcock, Cormorant (the latter to be seen on the river regularly each winter); others again are casuals whose appearance cannot be anticipated. Some of these have been recorded only once in the last five years, e.g., Shoveller, Water Rail, Great Grey Shrike. In the following list, species which have bred at Kew within the period under review are marked \*.

Great Crested Grebe.	Great Black-backed Gull.
*Little Grebe.	Lesser Black-backed Gull.
Cormorant.	Herring Gull.
Heron.	Common Gull.
Teal.	Black-headed Gull.
Widgeon.	*Little Owl.
Shoveller.	Kingfisher.
Pochard.	Skylark.
Common Scoter.	Rook.
Mute Swan.	Jackdaw.
*Sparrow Hawk.	Magpie.
Kestrel.	Long-tailed Tit.
*Red-legged Partridge.	Meadow Pipit.
*Common Partridge.	Grey Wagtail.
Water Rail.	Great Grey Shrike.
Lapwing.	*Goldfinch.
Common Snipe.	*Linnet.
Woodcock.	Lesser Redpoll.
Curlew.	Reed Bunting.
Green Sandpiper.	Tree Sparrow.

To sum up these lists, during the last five years ninety-nine species of wild birds have been recorded in or over the Gardens or on the river along our boundary, and forty-four have bred here. While these figures fall short of those for Richmond Park, with its far greater area, they are still considerable. The number and variety of species, the unexpectedness of some of the records, and the interest and beauty of some of these birds surely support Hudson's view that wild birds are not least among the attractions of a garden.

J. SOUSTER.

\* J. Souster, *Journ. Kew Guild*, 1955, 296-300 (1956).

† "Bird Life in the Royal Parks." Reports for 1951-2 (1953) and 1953-4 (1955).

A "stop press" item from Mr. Souster. A record of Cross-bills in the Gardens came to my notice too late for inclusion in my article. They were seen in November, 1956, by Mrs. W. B. Turrill on the roof of Herbarium House. This interesting record, the first of this species in the Gardens for some 20 years, brings the total for the five years to 100.

#### COLONIAL OFFICE BOTANICAL EXPEDITION TO SOUTHERN TANGANYIKA, 1955-56

During the summer of 1955 another botanical expedition to East Africa was organised in connection with the Flora of that area at present being prepared at the Herbarium, funds being made available by the Colonial Office. The object was to visit and collect intensively the Southern Province and especially the Songea District of Tanganyika, an area botanically very little known.

Mr. E. Milne-Redhead and I left London in September and after a welcome three weeks' rest aboard ship arrived at Mombasa in mid-October. Our vehicle had already arrived and having loaded our equipment we proceeded to Nairobi. Here we were met by Dr. P. J. Greenway, an old Kewite at present in charge of the East African Herbarium. During the next two weeks of assembling further equipment, stores and staff, he placed himself and his house at our disposal and it would be impossible for us adequately to express our gratitude to him. Whilst at Nairobi we paid a short visit to the soda lake at Magadi, the home of countless flamingoes. We also met Mr. Brian Perkins and his colleagues of the Nairobi Parks Department, where there is a strong contingent of Kewites.

At the end of October we finally set off for Songea with our staff of four Africans, all of whom stayed with us till the end, and some two tons of equipment. Our route led us first to Tanga, on the coast, where we spent a pleasant few days as the guests of Major and Mrs. Faulkner, the latter an ardent collector for Kew. From there a short visit was made to Pangani where we stayed with the District Commissioner, another Kew collector, Mr. R. E. S. Tanner and his wife.

At Morogoro, the next important place on our route, we met various members of the Forestry Department Staff, including Mr. S. R. Semsie, who later joined the expedition and gave us great help. From there we proceeded to Dar es Salaam and thence southwards by the coast road to Lindi. A short visit was made to the Rondo Plateau and, after sending off our first crate of specimens, we set off on the last lap of our journey to Songea, 400 miles inland. We had been warned that we must reach Songea by Christmas as the road was liable to be closed so we hurried on and finally got there on the 22nd of December. A week or two later the road was impassable and remained so until the following May.

Using as a base Songea Government Rest House, kindly placed at our disposal by the District Commissioner, we collected steadily

for the next five and a half months. We reached the shores of Lake Nyasa and the Matengo Hills on several occasions and paid a brief but very productive visit by air to Mbeya. During the season some 60 inches of rain were recorded and travel by road was always difficult and often hazardous. Despite this we travelled a total of some 7,000 miles. Whilst at Songea we soon became accepted as residents, were dubbed "the boffins", and the hard work was occasionally relieved by parties at the club.

Leaving Songea towards the end of June, we returned fairly rapidly, after a breakdown in the early stages of the journey, to Nairobi via Njombe and the Great North Road. Once again Dr. Greenway gave us hospitality and great help in the final winding up of the expedition.

Returning by air, we broke our journey at Entebbe and had a brief glimpse of Uganda, staying as the guests of Dr. E. Chenery, who worked as a visitor in the Kew Herbarium some years ago.

Whilst in East Africa we were very impressed by the kindness and helpfulness of everyone with whom we came in contact and our very grateful thanks are due to them all. Our collections amounted to about 5,000 gatherings of dried specimens, mostly in quintuplicate and a very high proportion of them with supplementary material preserved in alcohol. In addition about 400 Kodachrome photographs were taken of plants and vegetation.

PETER TAYLOR.

## CHRONICLE OF AN OLD KEWITE

Being extracts from the Memoirs of William Dallimore, sometime Keeper of Museums and upon whose suggestion *The Kew Guild* originated.

### CHAPTER XVI

#### LIFE AND WORK AT KEW : 1896-1901.—THE TEMPERATE HOUSE

I took charge of the Temperate House on September 14th, 1896, and found plenty of hard work before me. I began by trying to reduce some of the insect pests. My first operation was to thin out and cut back climbers. Pot plants were removed from stages, the gravel taken off, and stage and floor covered with bass mats. As the loose climber growth was cut back to the main stems it fell on to the mats and was taken away and burnt. Stages and paths were then sprayed with an insecticide, after which a large tub of insecticide was taken round on planks and rollers, and whenever it could be managed the main stems of the climbers were cut loose and dropped into the tub. They were then cleaned and the rafters and wire supports scrubbed before they were returned to their places. Stages were scrubbed and the gravel or breeze washed before the cleaned plants were returned. Although it was a bad time of year for such drastic treatment very few climbers were lost.



There were Palms, Cordylines, Yuccas and other plants 20, 30 or more feet high, and all had to be cleaned. To get at the heads blocks were fixed to the roof girders and men were drawn up on a boatswain's chair arrangement with a pail of insecticide hanging on the side, and ladders were slung out from the gallery from which men could work, the pail of insecticide being slung from a rung of the ladder. We made our own insecticide with soft soap and paraffin. Later, in an effort to keep the plants clean by syringing, we boiled quassia chips with the soft soap before adding the paraffin.

As thrips were abundant on the taller plants I asked permission to try and fumigate the house. The Palm House had been fumigated several times, but not the Temperate House as it was feared that ferns and other plants might not withstand dense tobacco smoke. Real tobacco was used at Kew for fumigating plant houses. It was a very mixed lot that had been confiscated by excise officers, and it was said that it had been treated in some way to make it unfit for ordinary use before being issued to Kew. I was given the necessary permission for a trial and one wet afternoon in November, when the atmosphere was heavy, I collected about  $1\frac{3}{4}$  cwts. of tobacco from the stores, got together all the fumigating pots I could find, borrowed two braziers from the Clerk of Works and a portable forge from the men who were building the new wing, with two labourers from the Arboretum to help. With the men working in the house, 10 men were employed on the job, and in order to see that no tobacco was allowed to blaze I walked about from point to point damping the tobacco when necessary. The forge was the most effective unit for we got a volume of smoke from it almost like that from a factory chimney. After the first hour the atmosphere became unpleasant and after  $1\frac{1}{2}$  hours the first casualties occurred, some of the young gardeners having to leave the house. It took  $2\frac{1}{2}$  hours to use all the tobacco and by that time the smoke was very dense. At the conclusion there were only the two labourers, the stoker, and one young gardener to leave the house; I was still about but very unhappy. Unfortunately I could not be sick and was unwell for hours. The labourers and the stoker did not turn a hair and during the work smoked liberal quantities of the tobacco in their pipes. I warned them that the tobacco may have been treated to render it unwholesome but they said they would chance that. Two were ex-soldiers and the other an ex-naval man and, as they said, they were case-hardened to tobacco smoke. Each man employed at the work, with the exception of the foreman, received one shilling extra on his week's pay. The attempt was successful, the only plants injured being some *Echiums* that had their leaves browned. I was asked by the Assistant Curator to repeat the fumigating a few weeks later in order that he might get an idea of how the building filled with smoke. That time the gardener who had survived the first ordeal was the first to succumb but, again, neither the labourers nor the stoker were affected, in fact I think they enjoyed the exper-



ience; they were able to smoke an unlimited quantity of tobacco during forbidden hours and had an extra shilling each to look forward to on pay day.

Those two efforts helped very much in the reduction of insect pests, the smoke got into crevices we could not reach and a lot of mealy bug was killed as well as thrips. A good deal of mealy bug fell to the ground. As long as I had charge of the house it was fumigated at least once a year. I am a non-smoker but I do not count it as a virtue. I put it down to the bad times I experienced in my youth in fumigating plant houses. The small structures at Rylances and at Chester were bad enough but nothing in comparison with the Temperate House at Kew. The experience quite put me off tobacco.

Early in the spring of 1897 the beds were prepared for planting in the new wing or Mexican House. Unfortunately the loam was the newly dug top spit from grass land, and a large number of wireworms came with it. At the south end of the centre beds rockeries were built for succulent plants. Planting was carried out in March and from that time, throughout summer, there was an every morning job of catching wire worms. Some mornings as many as 1,000 were caught. I wonder whether the late Mr. H. H. Thomas, the author of many books on horticultural subjects, remembered those mornings? He was a student gardener at the time and the first to have charge of the Mexican House. Several means of trapping wireworms were tried, the most efficacious being potatoes. A short stick was stuck into each potato and they were buried two or three inches beneath the surface of the soil. The wireworms began boring into the potatoes and could then be pulled out and dropped into paraffin. As immersion in paraffin for several hours did not kill them, they had to be destroyed by other means. Someone recommended watering the soil with a strong infusion of mustard. We gave it a good trial but were very dissatisfied with the results.

In addition to Palms and other decorative plants, numerous plants of economic value were planted in the Mexican House, and during those early years the Mango, Papaya, Tree Tomato and Metford's Lemon were conspicuous among those that fruited. The Peruvian Tree Tomato (*Cyphomandra betacea*) grew about eight feet high with a widely spreading head, and it bore several hundreds of its oval, plum-like fruits, which are orange-scarlet when ripe and were much admired. As the fruit is used for making jam in South America, I took some fruits home when they began to fall and my wife made them into jam which was distributed in small containers to several of the officials to try. As jam it was unknown to all at Kew but those who tried it voted it to be delicious.

The completion of the Himalayan House gave us a lot of work during the winter 1898-1899. The beds were prepared on the same principle as those in the Mexican House, but, as many Rhododendrons were to be planted, a compost was prepared of a mixture

of two parts loam, one part peat, and one part coarse sand. A train load of Himalayan Rhododendrons, some of considerable size, was presented by Mr. Shilson of Tremough, near Falmouth, and other Rhododendrons, Camellias, etc., were transferred from the centre house. Two rocky pools were formed at the north end of the house which gave us some trouble, as heavy blocks of stone of irregular shape had to be balanced on an 18-inch wide wall without doing anything that would impair its water-holding strength. The work so intrigued the Director that he paid us a special visit to see how we managed it. As the whole house stands on a terrace some six feet above the surrounding ground all heavy weights had to be taken up the steps on planks and rollers.

All watering had to be done with rain water collected in a large tank—there is a series of such tanks connected with the Temperate House—an ugly pump worked by a large wheel was used for distribution in the Himalayan House. It was not very satisfactory and in the course of time it was removed and a line laid so that pumping from all the tanks could be done from the engine room in the stable yard.

One of my early successes in the Himalayan House was the flowering of a particularly good form of *Buddleia Colvillei*, which both grew and flowered magnificently. The rare *Rhododendron Nuttallii*, with its handsome, long-tubed, fragrant flowers, also bloomed well. The completion of this house filled a long felt want at Kew as it enabled us to give rather tender plants the little protection they needed without much fire heat, in fact artificial heat was only supplied to keep the temperature above freezing point. A tree that grew remarkably well and created much admiration was a very beautiful glaucous form of the Kashmir Cypress (*Cupressus cashmeriana*), which was not long in reaching the highest point of the roof.

As soon as the Himalayan House had been planted we began remaking the beds in the centre house. When possible a bed was cleared of plants and entirely remade, but in most cases large, well developed specimens had to be worked round and, when possible, raised, with a mass of earth attached to the roots. The beds were drained and bottomed as was done in the wings, and the drains were connected with air pipes outside the house. The old soil was wheeled onto the lawns in the vicinity and spread about, and a layer six inches deep was spread over the terrace on which the house stands. Until that time the terrace, which had been built of gravel taken out of the lake, looked very bare and ugly. The layer of soil enabled us to sow it with grass seed. When going through the beds we got rid of a number of variegated Aucubas that had been in the house from the time when it was thought that they were not quite hardy.

A number of seats were provided for visitors but they were rather ugly ones. There were some very nice comfortable seats a short distance away on the veranda round the Picture Gallery. I

coveted those seats and in the end changed them one foggy day. The change was not noticed at once, and when it was the general opinion appeared to be that if I could effect the change without notice and it should have remained unnoticed for some weeks, I had a right to keep the seats. I think that they are still in the house. There was one disadvantage about them; they were so comfortable that several elderly people took to using them for their afternoon's snooze.

Many regular visitors came to the Temperate House, amongst them two who were particularly interested in Himalayan plants. They were General Sir Henry Colet and Sir Dietrich Brandis. Both had spent many years in India and were engaged upon private work in the Herbarium. They were greatly interested in *Lonicera Hildebrandii* and *Rosa gigantea*. I am not sure that Sir Henry had not introduced one if not both of them. When I was able to tell them that the former had set flower buds they rarely missed a day in coming to note progress. When the flowers began to open I had a ladder fastened to the rafters in order that they could make a close inspection of the blossoms. *Rosa gigantea* flowered some years after I had left the house.

When the Himalayan House was planted a number of Lilies were planted among the Rhododendrons. Two that grew and flowered exceptionally well were *Lilium auratum* and *L. Henryi*. One bulb of the latter produced a very strong stem carrying over 50 flowers in the head. On seeing it Dr. A. Henry, who introduced it from China, told me that in a wild state he had never seen a stem carrying more than seven flowers and usually only five or less.

On the lawn behind the Temperate House were a number of beds filled with roses and various flowering shrubs. They were placed under my charge with the view of keeping me interested in outdoor questions. In one of the beds were some bulbs of *Lilium Brownii* var. *chloraster*. When it flowered in 1897, by using it as the female and *L. Henryi* as the male, I was fortunate enough to get a few seeds. From them several bulbs were raised which flowered in 1900. There was no doubt about them being hybrids and they were named *L. kewense*. A figure of a flower with a description by W. W. (the Assistant Curator), appeared in *The Garden*, LVIII, p. 99 (1900). At that time it was the only cross attempted but during the intervening years I have tried to effect crosses with *L. Henryi*, using it in both directions, but without success. I have always wanted to get a hybrid between it and *L. auratum*. *L. kewense* was, I was told, the first authentic hybrid lily to be recorded, though suggestions had, I think, been made that certain kinds were probably natural hybrids.

I made several Rhododendron crosses in the Temperate House, the chief parents being *R. Griffithianum*, *R. grande* and *R. arborum*. I was unable to keep them under my control until they flowered, but one attractive hybrid was named by my successor after my eldest daughter, "Kathleen Mary Dallimore". I have

a bush in my garden that flowers profusely. Two interesting hybrids I raised were *Strelitzia kewensis* and *Cheiranthus kewensis*. The former was only of botanical interest. It was raised between the tall-growing *S. augusta* and the stemless *S. reginae*, the "Bird of Paradise Flower" of South Africa. It resembled *S. augusta* in its strong, branched trunk and *S. reginae* in flower arrangement. *Cheiranthus kewensis* was a bushy wallflower raised by crossing the Canary Island *C. mutabilis* with a garden wallflower. The hybrid could be grown from cuttings and by repeated stopping formed a shapely plant 1½ feet high and as far through. By growing it in pots out of doors in summer, it flowered well during the greater part of winter and early spring in a cool greenhouse. The fragrant flowers were yellow and bronze.

A few plants grown in the Temperate House that excited attention were Metford's Lemon that bore fruits up to two pounds in weight; *Cereus giganteus*, a cactus with a long, stout, cylindrical deeply ridged stem, copiously armed with strong spines, which produced white flowers from the crown; *Echium Wildpretii* and *E. callithyrsum*; several Banksias; many kinds of *Acacia*; *Camellia reticulata*, a most beautiful species; *Hidalgoa Wercklei*, sometimes referred to as a climbing *Dahlia*; and *Clianthus Dampieri*. The last is an Australian plant known as "Sturt's Desert Pea". It is difficult to cultivate on its own roots, but information was obtained from a German source that seedlings grew well if they were grafted on seedlings of the "Bladder Senna" (*Colutea arborescens*). I tried grafting and grew some good plants. The best one was grown in a wire basket hung in the Himalayan House. It flowered for a long time and at one period carried over 60 heads of expanded flowers.

Although on fine days the house was visited by many people and on Sundays and Bank Holidays by crowds, during the five years I had charge, I do not remember any damage to plants being done by visitors, neither was there any rowdiness, and at that time no entrance fee was charged to enter the gardens.

## In Memoriam

J. C. VAN BALEN

It is with regret that we learn of the death of Mr. C. J. van Balen at the early age of 63, who for so many years has been regarded as one of South Africa's outstanding horticulturists. He left Kew in March, 1919 and entered the Parks Department at Cape Town serving under the late Mr. Ridley.

In 1923 he joined the Pretoria Parks Department and in 1937 accepted the post of Assistant Director of Parks in Johannesburg. It was not long before he was appointed Director from which position he retired in 1953. His memory will be perpetuated by the

plant *Aloe vanbalenii*, a new species which he discovered and which was later named after him. Our sympathy goes out to his next-of-kin.

\* \* \*

### GEORGE URTON

Mr. George Urton met his death rather tragically on November 8th, 1956, in that he accidentally fell over a 200-ft. high krantz in the newly created Settlers' Park in Port Elizabeth, falling into a pond below.

Mr. Urton left Kew in 1939 to join the City of Grahamstown Parks Department and it was not long after that the war intervened and he ultimately saw active service in the Middle East and Italy. In 1945 he joined the Parks Department, Port Elizabeth and later became Assistant Superintendent. Those acquainted with Mr. Urton will recall his pleasing disposition and his great interest in both horticulture and in plants growing in the wild, all of which helped him to become very highly esteemed in South African circles.

He was only 45 years of age and leaves a wife and daughter to whom we express our very deepest sympathy.

\* \* \*

### SAMUEL HENRY BRIEN

Mr. Samuel Henry Brien died peacefully at home at Kew on July 27th, 1956, though previously he had suffered considerable pain and illness for a period of nine months. His early training was gained in many well-known gardens in Ireland, and at one time he was Superintendent of the Gardens and Pleasure Grounds in Glasnevin, Co. Dublin. He left Kew in 1906 to return to Ireland and after some 20 years there came back to this country as Head Gardener of a large estate near Derby. The garden was closed down at the outbreak of the war, 1939 and he then served throughout the duration at Kew rendering very valuable aid. On retirement from the Gardens he worked for some nine years in charge of the garden of Mr. Joseph Mears at Teddington.

Mr. Brien leaves a wife and two sons to whom we tender our deepest sympathy.

\* \* \*

### HARRY WILLIAMS

It is with regret that we record the passing of an old Kewite, Mr. Harry Williams, who died on September 28th, 1956.

After serving his apprenticeship at Tolvean, Redruth, he later moved to Trevarro, Helston, where he rose to foreman. Mr. H. Williams entered Kew in 1894 and served in the Arboretum with Mr. W. Dallimore and the late Mr. W. J. Bean. He also worked in the Alpine Department. He acted as Secretary of the Mutual

Improvement Society. On leaving Kew in 1896, he became foreman at Heligon, St. Austell, and was later Head Gardener at Trevince, Gwennap. Later in his career he became Lecturer and Demonstrator to the Cornwall Education Committee. He was appointed a Justice of the Peace and was at one time Chairman of the Redruth Urban District Council.

The photograph was taken on his 80th birthday.  
We extend our sincere sympathy to his widow.

\* \* \*

#### JOHN THOMAS SMITH

We regret to report the death of Mr. John Thomas Smith. He died at his home in Peterston-super-Ely at the age of 72. He left Kew in 1911. After service with the infantry in France during the 1914/18 war, he was employed by Mr. Reginald Cory at Dufryn. Later he took over the garden of Sir W. Reardon-Smith at Peterston.

His services as a lecturer and judge were eagerly sought. In addition to being a member of the Cardiff Gardeners' Association for over 30 years, he was Chairman of the Barry Chrysanthemum Show for a number of years.

Old Kewites and garden lovers were always welcomed to the Gardens. He imparted to each one a feeling of the deeper values of life. He shared with his wife a love of the English countryside.

Three Kewites were present at the funeral—Messrs. T. W. Wiltshire, C. R. Gregory and D. McGregor, a contemporary at Kew.

\* \* \*

#### WILLIAM J. DYSON

Regretfully we record the death of Mr. W. J. Dyson on September 24th, 1956. He was born in 1871, his father being Head Gardener at Madresfield Court. Commencing his horticultural career at Cambridge Botanic Gardens, he later entered Kew and at one time worked with Mr. Dallimore and Mr. Osborn in the Arboretum. For several years after leaving Kew he worked in a commercial establishment. Later he left horticulture to become a partner in business, but his love of plants continued and, upon retirement, he built a bungalow and several glasshouses in a garden of 2½ acres at Rudgwick, Sussex.

We offer our deepest sympathies to his widow and to the remaining son of his first marriage, Mr. R. C. Dyson, Deputy Superintendent of Brighton Parks Department.

\* \* \*

#### WILLIAM LESLIE

A report was received in May of the death of Mr. William Leslie at the General Hospital, Toowoomba, Queensland on April 26th, 1956, at the age of 82 years. He left Kew in January, 1899

when he was appointed Assistant Superintendent at the Royal Botanic Garden, Trinidad. He resigned from this post in 1907 and was appointed Cocoa Expert for the firm of Messrs. Cadbury at Accra, W. Africa, a position which he gave up for health reasons and which eventually led to his going to live in Queensland.

He purchased land and cultivated fruit in company with his brother and after a number of years of successful fruit growing obtained an appointment under the Queensland Government as Fruit Adviser, eventually retiring on reaching the age limit. To his relatives we tender our deepest sympathy.

\* \* \*

#### JAMES PIRIE

It is sad to record the death of Mr. James Pirie on January 25th, 1956, at his home in Fife, Scotland. He left Kew to join the staff of Mr. A. Brooks as Superintendent of Agriculture in December, 1923, and remained there until 1938 when he was promoted to the position of Senior Agricultural Superintendent, Northern Territories, Nigeria. He returned from this post in 1944. He leaves behind a widow to whom we express our sympathy.

\* \* \*

#### H. H. THOMAS

It is sad to have to record the death of Mr. H. H. Thomas who passed away on February 27th, 1956. Only three years previously he was President of the Guild, and members will find a great deal of information about his life and his work in the Journal for 1955.

We express to his wife our deepest sympathy in her sad loss. Mr. Thomas was in his 80th year.

\* \* \*

#### MRS. E. M. COTTON

It is with deepest regret that we record the sudden death of Mrs. Cotton on April 19th, 1956. Mrs. Cotton was born in Australia on May 1st, 1889, and came to England five years later. Before her marriage in 1915 she spent a year on the Herbarium staff and published several important papers. Mr. and Mrs. Cotton returned to Kew in 1922 when Mr. Cotton was appointed Keeper of the Herbarium and Library. Mrs. Cotton took an active interest in the social life of Kew and was ever ready to lend a hand in voluntary work. Our deepest sympathy is extended to Mr. A. D. Cotton, his daughter Annette and his son Peter.

\* \* \*

It is with regret that we have to record the deaths of the following:—Messrs. T. Stott, A. W. Anderson and G. D. Udale. We would all prefer to include a worthy record of these Old Kewites and any others who have passed away and would welcome any information upon them.

## KEW CHRISTIAN UNION

During the past year we have continued to meet fairly regularly each fortnight. Bible-study-discussion was the main feature and fewer outside speakers were invited as a result of less support partly due to clashes with other Kew activities and lectures. Friday at 5 p.m. is now the only time available for meeting because of new hours at the Herbarium and Mycological Institute. Notices are posted on the main notice-board and all interested are warmly invited to come. We are glad to hear that Geoff Manger, one of our original members, is now a horticulturist in the Church Missionary Society at the Rural Training Centre, Asaba, W. Nigeria.

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## KEW STAFF LIST

(as at December, 1956)

\* Life Member of The Guild.

† Formerly a Student Gardener.

Entered  
Kew

DIRECTOR'S OFFICE		
Director .....	G. Taylor, D.Sc., F.R.S.E., F.L.S., V.M.H. ....	1956
Assistant Director (Senior Principal Scientific Officer).....	*N. L. Bor, C.I.E., M.A., D.Sc., F.L.S. ....	1948
Establishment Officer.....	J. H. Crossman.....	1957
Clerical Officer/Secretary.....	Mrs. A. M. E. Kendall.....	1947
Clerks .....	Mrs. L. A. Kell.....	1948
	Miss C. M. Newall.....	1952
Telephone Operator.....	Miss R. Duffield.....	1954
HERBARIUM AND LIBRARY		
Keeper (Senior Principal Scientific Officer) .....	W. B. Turrill, O.B.E., D.Sc., F.L.S. ....	1909
Senior Principal Scientific Officer...	†C. E. Hubbard, O.B.E., F.L.S.....	1920
Principal Scientific Officer.....	V. S. Summerhayes, B.Sc.....	1924
" " " .....	F. Ballard, B.Sc.....	1929
" " " .....	N. Y. Sandwith, M.A., F.L.S., F.R.G.S. ....	1924
" " " .....	E. Milne-Redhead, T.D., M.A., F.L.S. ....	1929
" " " .....	R. Melville, B.Sc., Ph.D., F.L.S....	1934
" " " .....	R. W. G. Dennis, B.Sc., Ph.D.....	1944
" " " .....	A. A. Bullock, B.Sc., F.L.S.....	1929
" " " .....	J. P. M. Brennan, M.A., B.Sc., F.L.S. ....	1948
" " " .....	J. B. Gillett, M.A., F.L.S. (Colonial Office) .....	1948
Senior Scientific Officer.....	*J. R. Sealy, B.Sc., F.L.S.....	1927
" " " .....	R. W. J. Keay, M.A., F.L.S. (Over- seas Civil Service).....	1951
" " " .....	R. D. Meikle, B.A., LL.B., F.L.S....	1947
" " " .....	J. Lewis, B.Sc., F.L.S., A.K.C. (Colonial Office).....	1950
Scientific Officer.....	F. N. Hepper, B.Sc., A.L.S.....	1951
" " " .....	D. A. Reid, B.Sc.....	1951
" " " .....	L. L. Forman, B.Sc., A.L.S.....	1951
" " " .....	R. A. Graham, M.A., F.L.S. (Colonial Office).....	1956
" " " .....	D. H. Dalby, B.Sc., Ph.D.....	1956
" " " .....	N. K. B. Robson, B.Sc., Ph.D. (Colonial Office).....	1956
Senior Experimental Officer.....	†E. Nelves, F.L.S.....	1921
" " " .....	R. A. Blakelock, B.Sc., F.L.S.....	1937
Experimental Officer.....	Miss C. I. Dickinson, M.A., Dip. Agric. ....	1928
" " " .....	P. Taylor, F.L.S.....	1948
" " " .....	P. Wilson, B.Sc.....	1953
" " " .....	J. Kennedy-O'Byrne.....	1948
" " " .....	J. R. Tennant, B.Sc., F.L.S. (Col- onial Office).....	1956
Assistant Experimental Officer.....	Miss S. S. Hooper, B.Sc. (National Dianthus Collection).....	1952
Senior Assistant (Scientific).....	Miss M. I. Skan (Index Kewensis)	1919
" " " .....	Miss J. Forster.....	1947
Assistant (Scientific).....	Miss I. Blewett.....	1941

	Entered Kew
Assistant (Scientific).....	Miss A. Dunk..... 1953
" ".....	Miss L. Fletcher..... 1952
" ".....	J. L. Gilbert (Colonial Office)..... 1956
" ".....	Miss P. Halliday..... 1947
" ".....	Miss J. E. Hawkins (Index Kew- ensis) ..... 1956
" ".....	Mrs. I. Hitt..... 1949
" ".....	Miss A. James (Colonial Office)... 1956
" ".....	Miss J. McEwan..... 1956
" ".....	A. L. G. Sapper..... 1948
" ".....	Miss P. Z. Scammell (Colonial Office) ..... 1950
" ".....	Mrs. O. Tait..... 1953
" ".....	Mrs. S. M. Taylor..... 1955
" ".....	Miss A. C. Uchlein..... 1954
Visiting Botanist.....	D. J. B. Killick, M.Sc. (South Africa) ..... 1932
Librarian .....	H. S. Marshall, F.L.S..... 1954
Assistant Librarian.....	K. J. Churches, A.L.A..... 1956
" ".....	Miss D. M. Jepson, A.L.A..... 1954
Clerks (Library).....	Mrs. P. L. Irving..... 1934
" ".....	Miss M. Kierans..... 1937
Library Assistant.....	Miss M. C. Davey (Bentham- Moxon) ..... 1922
Hon. Associate (Transplant & Breed- ing Experiments).....	E. M. Marsden-Jones, F.L.S., F.R.E.S. .... 1922
Artist .....	G. Atkinson, A.L.S..... 1929
" ".....	*Miss Stella Ross-Craig, F.L.S. (Bentham-Moxon) ..... 1949
Preparer (Supervisor).....	Mrs. H. Wootton..... 1955
Temporary Technical Assistant.....	Miss J. D. M. Pearson, G.C. (Bent- ham-Moxon) ..... 1953
Clerk .....	E. E. Cope..... 1956
" ".....	P. Heawood..... 1954
" ".....	Miss G. Pring..... 1954
" ".....	Miss F. V. Surplice..... 1953
Shorthand Typist.....	Mrs. E. Jones..... 1953
" ".....	Mrs. H. M. Skews (Colonial Office) ..... 1955
Typist .....	Mrs. M. Brind..... 1952
" ".....	Mrs. B. F. Saunders..... 1951
" ".....	Miss I. L. Taylor (Colonial Office) ..... 1956
" ".....	Miss L. D. Whiteley (Colonial Office) ..... 1930
JODRELL LABORATORY	
Keeper (Principal Scientific Officer)...	C. R. Metcalfe, M.A., Ph.D., F.L.S. .... 1950
Scientific Officer.....	Miss M. Y. Stant, B.Sc., Ph.D..... 1934
Experimental Officer.....	F. Richardson..... 1950
Assistant (Scientific).....	Miss D. M. Catling..... 1956
Photographer .....	R. R. Zabeau..... 1925
DEPARTMENT OF ECONOMIC BOTANY	
Keeper (Principal Scientific Officer)...	F. N. Howes, D.Sc..... 1954
Senior Scientific Officer (Quarantine Work) .....	T. A. Russell, B.Sc., A.R.C.S., A.I.C.T.A. .... 1949
Senior Scientific Officer.....	S. G. Harrison, B.Sc..... 1950
Scientific Officer.....	Miss B. J. Youngman, B.Sc..... 1949
Assistant (Scientific).....	Miss J. K. Bowden..... 1913
Preparer .....	L. J. Harding..... 1951
Typist .....	Miss V. Horwill.....

## GARDENS

Curator .....	†W. M. Campbell, N.D.H., F.Inst.P.A. ....	1922
Assistant Curator.....	*†L. Stenning, A.H.R.H.S. (Tropical)	1925
" " .....	†S. A. Pearce, F.Inst.P.A. (Botan- ics) .....	1928
" " .....	†G. H. Preston, F.L.S. (Herbaceous)	1934
" " .....	*†S. W. Rawlings (Decorative).....	1936
" " .....	†J. E. S. Souster, N.D.H., F.L.S. (Temperate) .....	1943
" " .....	†G. E. Brown, N.D.H. (Arboretum)	1946
Foreman Gardener.....	*†H. Collin (Quarantine House) (Colonial Office).....	1923
" " .....	G. C. W. Gardner (Botanics).....	1926
" " .....	G. H. Anderson (Palm House).....	1940
" " .....	W. A. Mullins (Dianthus Collec- tion) .....	1942
" " .....	W. Bridle (Temperate House Pits)	1946
" " .....	H. Bruty (Ferneries — Tropical)...	1946
" " .....	P. G. Shutler (Arboretum).....	1946
" " .....	M. A. Wells (Temperate House)...	1946
" " .....	†F. Larkbey (Decorative).....	1947
" " .....	†G. Nicholson (Orchids—Tropical)	1947
" " .....	†A. G. Cook (Herbaceous and Rock Garden) .....	1948
" " .....	R. J. Chuter (Propagator).....	1953
" " .....	†N. Hickman (Tropical Pits).....	1955
Executive Officer.....	†E. G. Dunk.....	1914
Clerks .....	W. D. H. Prior.....	1955
" " .....	G. F. Lamb.....	1951
" " .....	Miss E. Mates.....	1948
Shorthand Typist.....	Miss A. G. Barton.....	1953
Typist .....	Miss M. Sillitoe.....	1947

## CONSTABULARY

Sergeant in Charge.....	W. Leaver.....	1935
Packer and Storekeeper.....	†H. W. Ruck.....	1907
Bird Keeper and Bellringer.....	J. H. Claiden.....	1919
Seed Collector.....	J. Paske.....	1929
" " .....	S. Sheffield.....	1947
Gardener Grade I.....	F. L. Burnell.....	1946
" " .....	J. Gibson.....	1947
" " .....	H. Hockley.....	1942
" " .....	A. Hughes.....	1920
" " .....	F. H. Jackman.....	1940
" " .....	H. J. Jackman.....	1949
" " .....	E. W. Macdonald.....	1950
" " .....	J. Mateer.....	1952
" " .....	W. Mort.....	1929
" " .....	C. W. Preston.....	1922
" " .....	E. Skyrme.....	1947
" " .....	J. Slater.....	1945
" " .....	F. W. Standen.....	1940
" " .....	R. J. Sadler.....	1951
" " .....	E. J. White.....	1940

## STUDENT GARDENERS

<i>Name</i>	<i>Entered Kew</i>	<i>Previous Situation</i>
Addison, P. ....	Oct., 1955	Liverpool Parks Dept.
Atkinson, Miss A. L. M. ....	Oct., 1956	W. Blom & Sons, Watford.
Barker, L. P. ....	Oct., 1956	W. Wood & Son, Taplow.
Beyer, R. I. ....	Mar., 1955	Bexley Parks Dept.
Catchpole, P. A. ....	Oct., 1956	Windsor Royal Gardens.
Cleet, A. J. ....	Mar., 1955	John Innes Horticultural Institute.
Clift, M. ....	Oct., 1956	Hillier & Sons, Winchester.
Collett, M. ....	Oct., 1956	John Innes Horticultural Institute.
Dumont, T. W. J. ....	Oct., 1955	W. Wood & Son, Taplow.
Dunn, P. G. ....	Oct., 1955	Birmingham Parks Dept.
Fleming, J. ....	Mar., 1955	Derby Parks Dept.
Floyer, Miss F. G. ....	Oct., 1956	Thornescroft, Shipley.
Forster, R. R. ....	Mar., 1955	John Innes Horticultural Institute.
Hale, A. J. ....	Mar., 1955	Bexley Parks Dept.
Hart, A. ....	Oct., 1955	Bodnant Gar., Tal-y-Cafn.
Horsfall, H. R. ....	Apr., 1956	Leeds Parks Dept.
Jakobsen, P. R. ....	Oct., 1955	W. Fromow & Sons, Windlesham.
Johnson, R. ....	Apr., 1956	Barrowford Parks Dept.
Marshall, W. ....	Apr., 1956	Royal Gardens, Sandringham.
McCracken, J. S. ....	Mar., 1955	Glasgow Parks Dept.
Messenger, G. W. ....	Mar., 1955	Ipswich Parks Dept.
Mills, L. C. R. ....	Oct., 1956	East Lodge, Enfield.
Neighbour, E. C. ....	Oct., 1955	Fulham Parks Dept.
Overeynder, H. ....	Oct., 1956	Kiln Lane Nursery, Surrey.
Paterson, A. ....	Apr., 1956	Cambridge Botanic Garden.
Powell, C. U. ....	Apr., 1956	Gunnersbury Parks Dept.
Powell, Miss M. C. ....	Oct., 1955	L.C.C. Parks Dept.
Prive, A. E. ....	Oct., 1955	National Fruit Trials, Wisley.
Risley, T. F. ....	Oct., 1956	Leicester Parks Dept.
Rooke, I. G. ....	Oct., 1956	Southend Parks Dept.
Rule, R. H. ....	Apr., 1956	Beckenham Parks Dept.
Ryder, F. P. ....	Oct., 1955	Manchester University Exp. Grnds.
Sales, D. J. ....	Apr., 1956	Hampton Court Gardens.
Saville, V. A. ....	Apr., 1956	R.H.S. Gardens, Wisley.
Shea, J. O. ....	Apr., 1956	Uxbridge Parks Dept.
Strabel, J. F. ....	Oct., 1956	Swanley Horticultural Institute.
Sumner, R. J. ....	Oct., 1955	Beckenham Parks Dept.
Thomas, R. G. ....	Apr., 1956	Ealing Parks Dept.
Vogt, A. ....	Nov., 1956	Ch. Lardet, Lausanne, Switzerland.

## IMPROVERS AND BOYS

S. E. Bird, R. H. Dungey, A. F. Goodwin, M. G. Garrett, M. Grime,  
 I. S. Hodson, J. F. Norris, A. J. Porter, P. J. Saul, D. W. Taber, A. G.  
 Vivien, D. A. Waterman.

## ADDRESS LIST OF OLD KEWITES

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

ABBREVIATIONS: H.G., Head Gardener; F., Foreman; N., Nurseryman; M.G., Market Gardener; C., Curator; D., Director; M., Manager; B.G., Botanic Gardens; S., Superintendent.

<i>Name</i>	<i>Left Kew</i>	<i>Present Position and Address</i>
Abbing, J. ....	Nov., 1936 ...	Beauwea Park, P.B., Grahamstown, S. Africa.
*Adamson, John ....	July, 1909 ...	Hardy Plant Nursery, Holywood, Dumfries.
*Addison, G. H. ....	May, 1938 ...	Botanic Gardens, Singapore, S.S.
Agate, C. J. ....	April, 1926 ...	21 Hayden Avenue, Great Neck, Long Island, N.Y., U.S.A.
*Aikman, Miss M. G. ....	Nov., 1924 ...	18 London Street, Edinburgh, 3.
Ainslie, E. ....	Sept., 1949 ...	Blackburn Parks Dept., and 19 Oban Grove, Astley Bridge, Bolton, Lancs.
*Airey, J. E. ....	May, 1939 ...	Westmoor Gardens, Mansel Lacy, Hereford.
Airy Shaw, B.A., F.L.S., F.R.E.S. ....	April, 1952 ...	13 Honor Oak Road, Forest Hill, S.E.23.
*Albert, Mrs. H. ....	Mar., 1945 ...	47 Arstice Street, Oyster Bay, N.Y., U.S.A.
*Alcock, Mrs. N. L., M.B.E., F.L.S. ....	Nov., 1918 ...	108 Cole Brook Street, Winchester, Hants.
Allen, Miss B. ....	Jan., 1946	
(See Mrs. F. Christopher)		
Allen, F. H. ....	Sept., 1948 ...	Coombe Villa, Wotton-under-Edge, Gloucestershire.
Allison, B. W. ....	Jan., 1930 ...	Asst. Supt., Parks Dept., Salford, Lancs.
*Allt, W. S. ....	Jan., 1911 ...	E. Market Street, Hyde Park, N.Y., U.S.A.
Alphonso, A. G. ....	June, 1956 ...	Botanic Gardens, Singapore, S.S.
Alston, A. H. G., M.A. ...	June, 1925 ...	British Museum (Nat. Hist.), S.W.7.
*Ambrose, Miss R. M. ....	Dec., 1945	
(See Mrs. J. Souster)		
*Anderson, A. W. C., N.D.H. (N.Z.)	Feb., 1926 ...	S., Parks and Reserves, Timaru, N.Z.
*Anderson, J. W. ....	June, 1910 ...	Granta, Bucklesham, Ipswich, Suffolk.
Appleby, J. ....	April, 1954 ...	53 Rathbone Road, Wavertree, Liverpool, 15.
*Armstrong, C. E., N.D.H. ...	April, 1947 ...	Hort. Lecturer, Kesteven Farm Institute, Caythorpe Court, Nr. Grantham, Lincs.
*Arnold, T. A. ....	Jan., 1931 ...	157 Jeppe Street, Johannesburg, S.A.
*Ashby, Mrs. D. ....	June, 1944 ...	Little Croft, Harston, Cambs.
(F. A. Sharps)		
Ashley, R. F. ....	Mar., 1954 ...	c/o R.H.S. Gardens, Wisley, Ripley, Surrey.
Ast, R. ....	Mar., 1956 ...	St. Andreas, Cham./Z.G., Switzerland.
Atkins, L. G., N.D.H. ....	Oct., 1931 ...	59 Cranwick Road, Lincoln.
Attenburrow, D. C. ....	Oct., 1954 ...	c/o D. of Agriculture, P.O. Box 338, Nairobi, Kenya.
Attwood, C. A. ....	Sept., 1950 ...	58 Centenary Road, Canley, Coventry.
*Aubrey, A. E. ....	April, 1910 ...	The Woodhouse Gardens, Grange Road, Tetterhall, Wolverhampton.
Avery, Edwin ....	Feb., 1946 ...	2 Newport Road, Barnes, S.W.13.
*Aves, J. J. ....	Aug., 1939 ...	District Supt., P.O. Box 1454, Parks Dept., Pretoria, S. Africa.

- d. A Chairman of Committee shall be elected by the Committee to take the Chair when the President is absent.
- e. Candidates for election as officers or ordinary Committee members may be proposed by any member of the Guild, provided that the names of candidates be sent in writing to the Secretary at least 21 clear days before the Annual General Meeting.
6. The Annual Subscription, which shall be payable on January 1st of each year, shall be such sum as the Annual General Meetings shall from time to time determine and shall entitle members to all 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 7s. 6d.]
7. 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. [This rule is abrogated at present by decision of the Annual General Meeting.]
8. The Guild shall publish annually a Journal containing a list of the Kew Staff, from the Director to the Student Gardeners, and such other information as shall appear desirable.
9. 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 annual Statement of the Accounts shall be submitted, and elections of officers and Committee members shall take place. Fourteen clear days before the Annual General Meeting the Hon. Secretary shall circulate to all members resident 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 together with their proposers.
10. There shall be a Benevolent Fund for the purpose of helping Kewites who may be in urgent need of assistance.
11. The Rules shall not be altered except by a two-thirds majority of those present and voting at the Annual General Meeting. Any proposals for the alteration of Rules shall be sent to the Secretary in writing at least twenty-one clear days before the date of the Annual General Meeting, and shall be sent by him to members resident in the United Kingdom at least seven clear days before the date of the Annual General Meeting.



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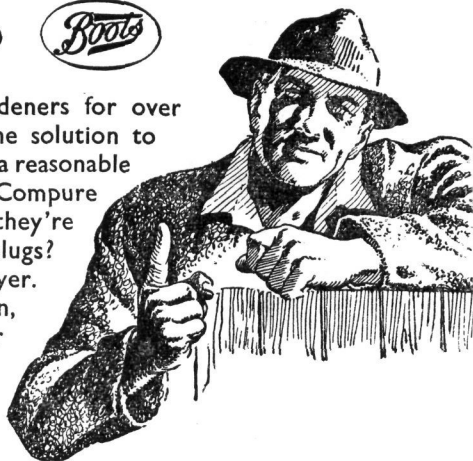
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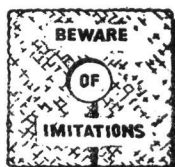
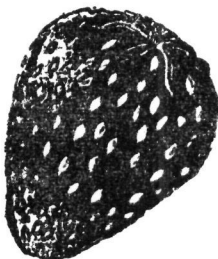
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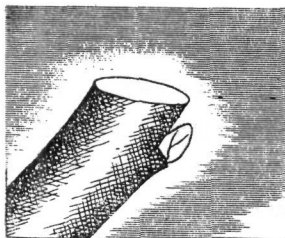


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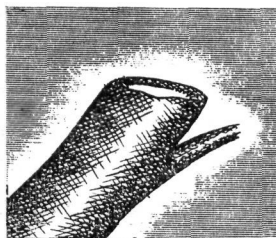
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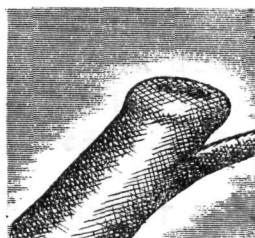
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1. The illustration shows the exposed wound after pruning.



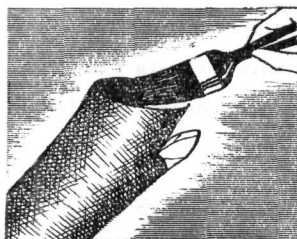
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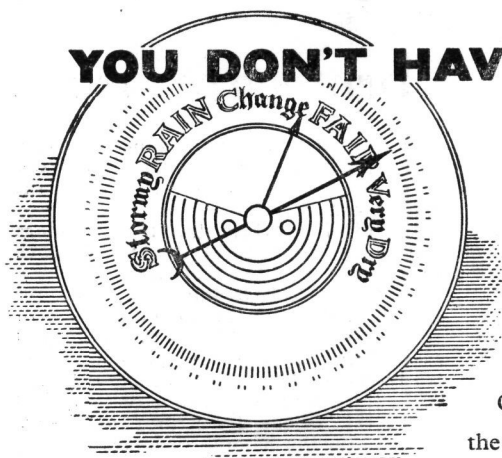
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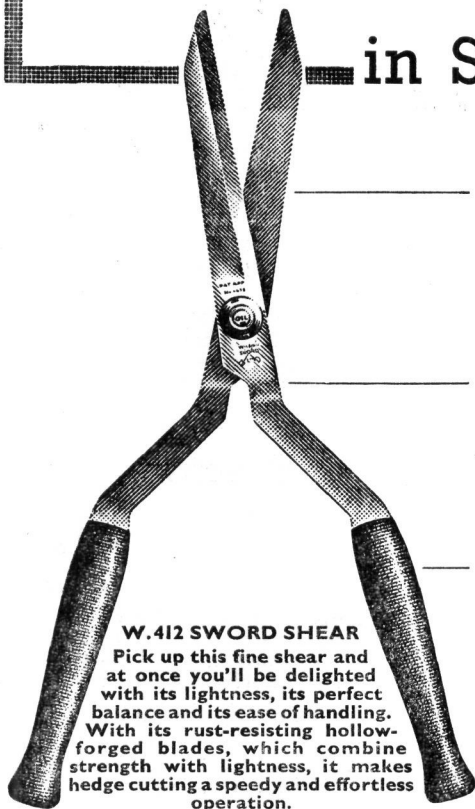
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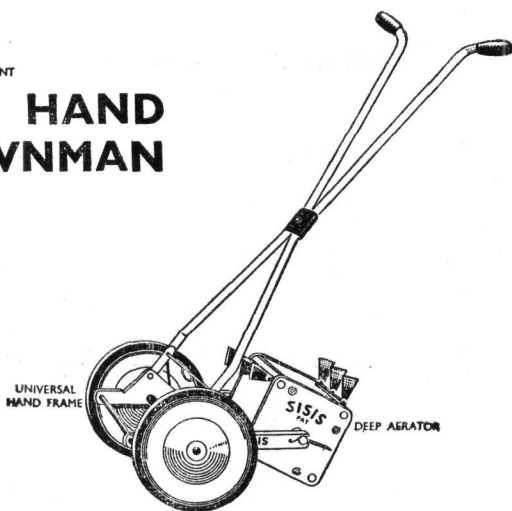
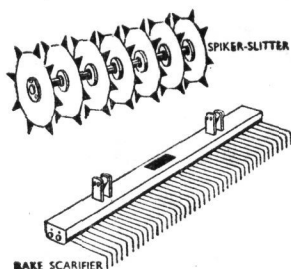
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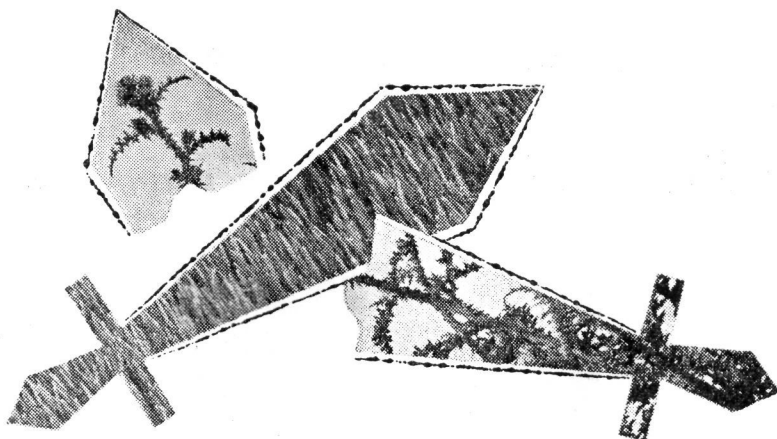
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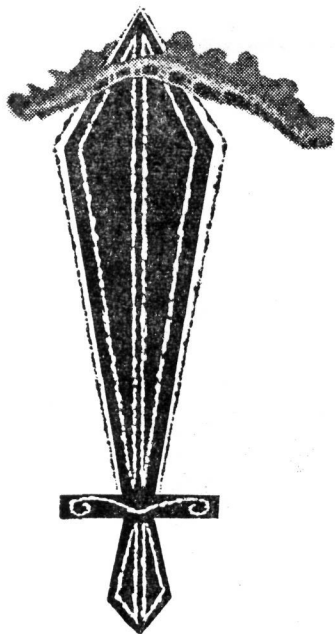
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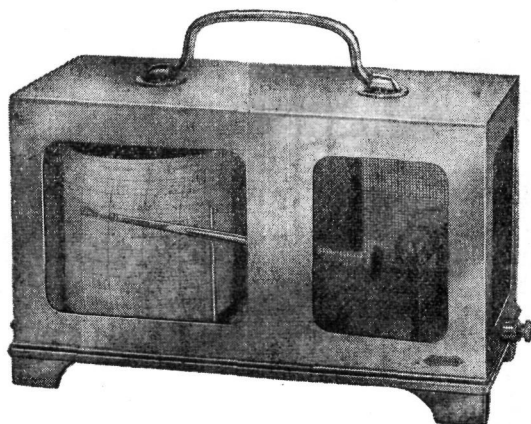
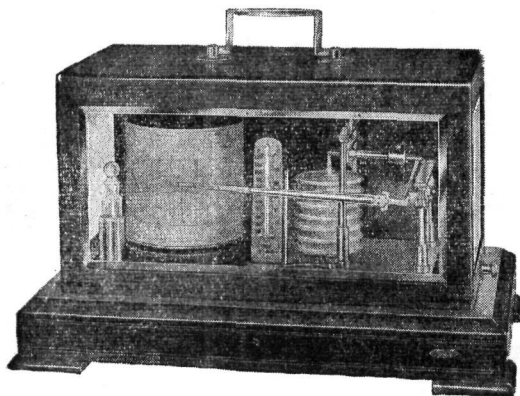


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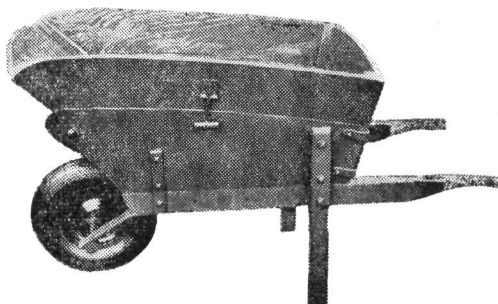
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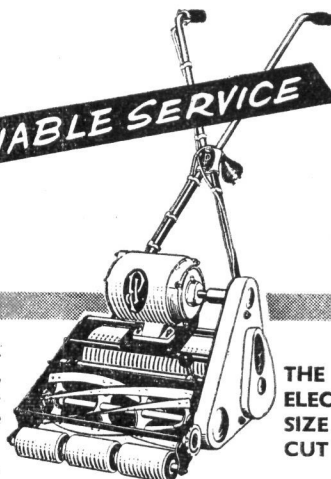
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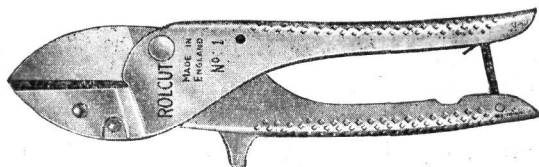
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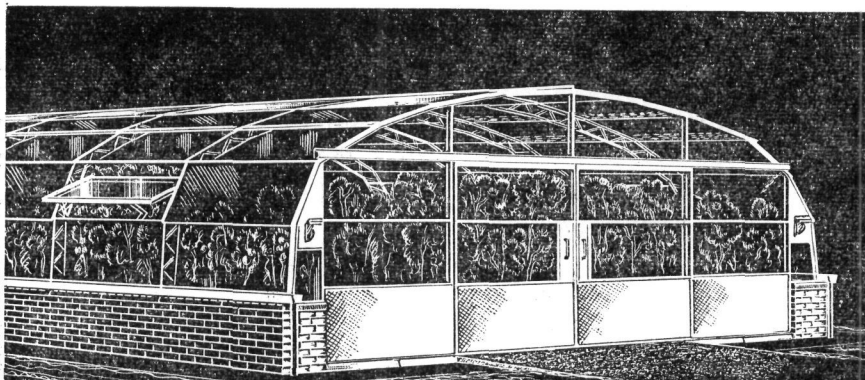
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