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AN ASSOCIATION OF MEMBERS OF THE KEW STAFF PAST AND PRESENT

1961

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Vice-Presidents : J. D. SNOWDEN, F.L.S., and C. F. COATES

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Hon. Secretary : J. R. SEALY, B.Sc., F.L.S.

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

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D. V. WELLS, Ruislip.	T. A. RUSSELL, Kew.
C. HUBBARD, Kew.	C. R. STOCK, Beckenham.
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Student Gardeners' Representatives : R. B. ANWYL and M. THERON

Hon. Auditors : G. H. PRESTON and S. A. PEARCE

EDITORIAL

A great day for the Kew Guild? On Friday, 20th October, 1961, our Secretary, Mr. R. Sealy, had the first indication by phone that our application to the College of Arms for a Grant of Arms had been favourably received. A great day indeed ! —for the Kew Guild will be based upon an even firmer footing. To quote from a comment made by that grand Old Kewite—Mr. A. J. Brooks—"I can think of no other guild or association which is more deserving of an official Coat of Arms and a recognised badge. Kewites have a world-wide reputation, they have served in almost every part of the globe and are a great credit to Kew and the Country—The Guild is the very heart and soul of Kew and thoroughly deserves official recognition."

Thus it is with an ever growing confidence that we present the opening number to Volume VIII of the *Kew Guild Journal*. Never has there been a committee which is more alive to the importance of the Guild or one which is more willing to do its utmost to secure an even firmer foundation with a sounder reputation. The record to date is one which William Dallimore and the many other giants of the past would have been proud of—we trust that future generations of Kewites will interpret our spirit correctly and act with the same eagerness and be proud to wear the official badge now being made available to them.

THE KEW GUILD

ANNUAL DINNER, 1962

at Chatham Restaurant, Victoria Street, S.W.1

Dancing during the evening

will be held on

Wednesday, 23rd May, 6-6.30 p.m. for 7-7.30 p.m.

THOSE WHO ATTENDED LAST YEAR will need no urging to attend again

THOSE WHO DID NOT would be well advised to attend this year

Every effort is being made to suit all "tastes" and there will be plenty of opportunity for meeting old friends

WILLIAM J. C. LAWRENCE. President 1961/62.

Like many other famous Kewites who have earned great reputations for themselves, both at home and abroad, our President started life without a silver spoon or the many advantages which accrue from public school and later, university training. Educated at an elementary school he gave early evidence of both his ability and personality by being elected "Head Boy", and afterwards commenced his working life at the age of 14 years as "crock boy" at John Innes Horticultural Institution. He had no knowledge then of the fact that he would spend the major part of his career in various forms of scientific research on behalf of the Institution. In those days John Innes, as the place was called by those fortunate enough to work there, was a small compact research unit at Merton under the leadership of William Bateson, the authority on Mendelism in Britain. Professor Bateson in his position as Director had one characteristic not common to many, it was his desire that even the gardening staff, engaged on research problems, should be made conversant with the purpose of the experiments. Growing up in such an atmosphere it is easy to see how our President gained the stimulus for work of this nature.

From 1917 to 1920 Mr. Lawrence served as telegraphist in the R.E. Signals, and after demobilization, was appointed an Exhibitioner at the Institute, where every effort was being made to catch up with research abandoned during the war years. Both under glass and out-of-doors genetical problems were pursued, the crops varying from potatoes, peas, mangolds, flax and tobacco to primulas, pelargoniums, begonias, ferns and most important of all, the study of fertility in fruit trees. Our President was called upon to assist Mr. M. B. Crane in fruit investigations, and continued this and other work until his period as a student was Though not a recognised teaching establishment, completed. numerous lectures were given to students and young gardeners on the staff, and this instruction combined with regular visits to the R.H.S. shows was a great incentive to gain further knowledge. The young improver gardeners at that time included men like Messrs. Agate, Ritchens, Studley, Williams and Ford, all of whom after later serving as Students were to journey on to Kew.

On the 3rd April, 1922, our President became a studentgardener at Kew, being posted to the Decorative Department to work under Mr. Coutts, gradually progressing through the frameyard and thence to the various charges under glass. In his studies he was outstanding, and had distinction been awarded in those days, he would have gained this high achievement in all the courses of lectures then available. His merits as a practical gardener were emphasised by his promotion to Sub-foreman in December, 1923, which duties he carried out successfully until in May, 1924, he entered the Herbarium as a temporary assistant. In July of that

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year he was invited by Professor Bateson to return to Merton to assist Mr. Crane in further studies on fruit trees, and thus came about his return to his first love.

A year later he was given his first research project on the inheritance of flower colour in the garden Dahlia, and the discovery of tetraploid inheritance in this plant, opened up a new and exceptional field for a combined study of the genetics and chemistry of flower colour. Studies on Streptocarpus followed and were extended to a genetical survey of speculation in the whole of Eustreptocarpus, and in all some nine papers were published giving the results of this study.

The economic depression of 1931-32 brought about a complete re-organization of the John Innes staff, and in consequence Mr. Lawrence was asked to become Curator, not only to take charge of the gardens, but also to be responsible for the training of the student gardeners. The success of this latter scheme of training led to an output of men who to-day hold many important, senior posts in horticulture. A strict disciplinarian, but a man always anxious to assist the young, our President, with his practical skill and scientific background became an ideal Curator. It was at this stage of his career that Mr. Lawrence began to work on the standardisation of seed and potting composts, which culminated in the invention of John Innes composts in 1939. Horticulture owes a great debt of gratitude for this discovery alone, because not only in this country, but throughout the world these composts are in general use helping to make plant cultivation easier and better for the gardener. This success was followed by investigations into glasshouse practices and environment on plant development, on methods of propagation, the use of artificial illumination, and the vexed problem of glasshouse design. In the movement of the Institution from Merton to Bayfordbury, the opportunity to design the glass unit, in part experimental in character, was granted our President and those who have visited Hertford will have noted with interest the departure from many of the old ideas.

The year 1950 saw the formation of a new research department at John Innes, the Department of Physiology and Plant Culture, with Mr. Lawrence in charge. Plant environment, soil sterilization, glasshouse climatology, and plant experiment followed, all matters of importance to the grower. The tomato figured prominently in these investigations and the work done on light, humidity and temperature on the growth and development of young plants have been of great national importance.

In the field of literature he is also famous, because in addition to collaborating with M. B. Crane in Genetics of Garden Plants, and with J. Newell in Seed and Potting Composts, he has been responsible for works such as Practical Plant Breeding, Better

Glasshouse Crops, Training for Horticulture, Science and the Glasshouse, and Soil Sterilization, as well as numerous scientific papers on cyto-genetics and glasshouse design and husbandry.

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A past President of the Horticultural Education Association, Mr. Lawrence's services to horticulture were recognized by the award of the Victoria Medal of Honour in 1951, and the Order of the British Empire in 1955. Thus our President has been honoured at home, and recognized abroad, as a man who has devoted his life to solving so many problems in the science and practice of horticulture. His personal contribution has been vast, but throughout the whole of his work he has maintained that quiet and unassuming demeanor, coupled with a good sense of humour, which have made him so well respected and liked by all who have been fortunate enough to work with him or to know him. Our President is thus a very worthy successor to the many great men who have, in the past, held this important position in the Kew Guild.

W. M. CAMPBELL.

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C. F. COATES.

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Vice-President, 1961/63.

Charles Coates was born in October, 1880, in Leeds but his parents moved to Catterick, three miles from Richmond, Yorkshire, when he was three years old. His father died when he was but fourteen years old, thus leaving his mother to fend with four children. Our Vice-President became the bread-winner, working during school holidays in the field. He recalls how he led the two front horses in a team of four ploughing shire horses which were strong and spirited and he could scarcely reach the reins! After leaving school he continued to work for over one year on the farm.

At the age of fifteen Coates found work at the nursery of Mack & Sons and thus started a long career in horticulture-his first task was perhaps a pointer to the future for it was to "tie-in" with raffia after the rose budder. The work at this nursery gave him a life's interest in propagation, but his next move after five or six years was to a private garden, Grimston Park, near Tadcaster. It was a large and extensive estate and Coates worked first in the kitchen garden and later as a journeyman in the fruit houses and pits. After five years Coates moved south to Harley Park, Sandy, Bedfordshire. The head gardener was Mr. Birkinshaw who at that time wrote the weekly notes on fruit for the Gardeners Chronicle. From journeyman in the fruit houses promotion to foreman quickly followed. After a stay of four years he moved to become headgardener at Manor Park, Patton, Bedfordshire. Staying in this post until World War I broke out, and after being unfit for service. he made his way to London. Arriving on the 15th September. 1915, with Regents Park in mind, Coates eventually visited Hyde

Park, but the mass of glasshouses seemed uninviting and so to Kew. Mr. Dear and Mr. Watson held a short interview and within a few minutes he was booked to start work on the following Monday.

His first department was the Temperate House Pits where he worked under Mr. Binter, and his first task was to pot some seedlings of *Eucalyptus gunnii*, to quote from a recent letter : "the seed I believe was from Mr. Balfour's garden at Whittingehame and to this day one or two of these are now growing near the Flagstaff." Coates soon moved to the Temperate House where Mr. Lavender was in charge. After promotion to "Foreman" of this Department the next move was as "Foreman" of the Arboretum Nursery. Later moves were among the collections of trees and shrubs in the Gardens.

During 1926 our Vice-President was enlisted by Sir Arthur Hill and Mr. Bean to carry out some of the pioneer work at Bedgebury, Mr. Dallimore being in charge of this work. This was followed by his move as Foreman to the Arboretum Nursery, a post which he held from 1929-49, having succeeded Mr. F. Knight (who is now Director of the R.H.S. Gardens, Wisley).

It is fitting at this state to quote from the *Journal* of 1949 : "Mr. C. F. Coates retired from Kew on October 28th, 1949, after thirty-four years of service. For over twenty years, Charles Coates was Foreman Propagator in the Arboretum nursery, and many students and others who were privileged to work under him will recall his skill as a knifesman and propagator. In addition, he was responsible for the raising of a number of new hybrid plants, and it is pleasing to record that a very beautiful Camellia which he raised is named after him. It is *Camellia x williamsii* "C. F. Coates". The parentage is *C. saluenensis x C. japonica var. quercifolia* and Coates gave an account of its raising in *Rhododendron and Camellia Year Book* (1956, pp. 92-93).

But Mr. Coates with his keen powers of observation was constantly on the lookout for unusual features, especially among seedlings. Thus he spotted the two Magnolia hybrids—*M. x kewensis* (*M. salicifolia* and *M. kobus*) and a cross between *M. tripetala* and *M. sieboldii* which it is proposed to name in honour of Mr. C. F. Coates. Coates also selected the *Cytisus scoparius* variety "Lena" which he discovered as a sport on *Cytisus scoparius* "Burkwoodii".

Even after leaving Kew, Coates continued to lead an active life, working part-time for example in the greenhouse of the Royal College of Art.

We wish our Vice-President many happy years with his wife in their home at Catterick, Richmond, Yorkshire, and may he have many leisure hours and opportunity to pursue his favourite recreations—Cricket and Rugby Football.

ANNUAL GENERAL MEETING, 1961.

The Annual General Meeting was held in the Students' Lecture Room at the Reference Museum (the old Museum II), Kew, on Saturday, 26th August, 1961, with the President, Dr. C. R. Metcalfe, in the Chair supported by the Hon. Editor, Mr. G. E. Brown, the acting Hon. Treasurer, Mr. L. Stenning, and the Hon. Secretary, Mr. J. R. Sealy, and with sixty members present.

At 2.30 p.m. the President opened the meeting by welcoming those present. Explaining the change of venue he stated that the Iron Room was at last to be pulled down. He remarked that the desks had been transferred to the present meeting place, which was to be used for lectures until a new lecture room was built. It had been hoped to hold the meeting in the Iron Room this year for the last time, but its condition was so poor that this was impractical.

After the Secretary had read the names of those who had sent apologies for absence, the President asked members to stand while the Editor read the names of the members of the Guild who had died since the last Annual General Meeting.

The business of the meeting then proceeded as set out in the Agenda.

1. MINUTES.

The Minutes of the last Annual General Meeting having been circulated to all members by printing them in the *Journal*, No. LXV, pp. 763-5, the meeting agreed that they be signed as a true record.

There being no matters arising from the Minutes apart from those on the Agenda, the President called on the Secretary to present the Report of the Committee for the year 1960-1.

2. ANNUAL REPORT,

(a) Annual Dinner. This year the Dinner was held at the Chatham Restaurant, Victoria Station, and was followed by dancing until 11.30 p.m., while for those who did not wish to dance there was ample accommodation for conversation with a refreshment bar open the whole time.

An account of the Dinner will be found on page 24 of this Journal

(b) *Journal*. The Journal was published on 14th July, the lateness of the date being due to the late arrival of copy both for the text and the advertisements. A final date for copy of 31st December would ensure publication in March, and this the Hon. Editor will attempt to secure for the next issue.

The cost of printing and binding 1,000 copies was £282, of which the blocks cost nearly £20 and the advertisements \$80-£90. The net revenue from advertisements was £120, so that this feature

of the Journal brings in a profit of £30-£40. It should be noted, however, that of the time which the Hon. Editor devotes to the Journal, about 40% is absorbed by work in connexion with advertisements, and the Committee is doubtful if it is reasonable to ask the Hon. Editor to devote so much of his time for a return of no more than £40. The Committee therefore proposes in the coming year to consider whether or not it is possible to dispense with the advertisements in the Journal. The Committee again congratulates the Hon. Editor on the excellent Journal which he has produced and urges members to give him every support by sending in material for publication, and by helping to keep the Address List of Old Kewites up-to-date and as complete as possible. The thanks of the Guild are due to Mr. Brown for his splendid work. The Index to Volume VI of the Journal, covering the years 1941-50 was also printed. The Index for Volume VII (1951-60) will be printed next year.

(c) *Trustees*. The Trustees of the Guild have always been the Director and the Curator. When Mr. Campbell retired from the latter post, he also relinquished the post of Trustee, and the Committee thereupon invited Mr. Stenning to take over the position. Mr. Stenning kindly agreed, and the necessary arrangements were made.

(d) Hon. Treasurer. Mr. Hickman, who was elected Hon. Treasurer at the last A.G.M. left Kew in April to take up a post at Hull, and was unable to take on the Treasurer's duties. Mr. Stenning, who had hoped to be able to hand over to Mr. Hickman at the end of 1960, very kindly continued to look after our financial affairs, and has, in effect, acted as Guild Treasurer throughout the year.

(e) Testimonials to Mr. Campbell and Mr. Stenning. The last Annual General Meeting decided that the Guild should record in some tangible form its appreciation of the services rendered by Mr. Campbell during the 14 years he was Hon. Secretary, and by Mr. Stenning during his 28 years as Hon. Treasurer. It was left to the Committee to decide how this should be done, and the Committee invited Mr. Campbell and Mr. Stenning to choose gifts to the value of £25 and £50 respectively, the amounts being in proportion to their lengths of service. An appeal to members for subscriptions to cover these amounts was circulated, and it was agreed that any sum collected in excess of £75 would be divided between the two recipients in the same proportion as the sums proposed. In fact the amount subscribed is double that suggested. It was hoped to present the gifts at the Annual Dinner. but unfortunately Mr. Campbell was ill and unable to attend. It was, therefore, agreed to postpone the presentations until the day of the A.G.M., and they will, in fact, be made at the Tea. Mr. Brown has acted as Treasurer for the testimonials, and the Committee is grateful to him for doing so.

(f) Guild Property. For the first time the Guild now has a complete record of its property. During the year Mr. Rawlings has brought together and listed all the photographs belonging to the Guild, 316 in all, comprising 261 individual portraits of past and present Kewites, 45 Annual Group photographs, and 10 pictures of the Annual Dinner. 154 of the photographs of Old Kewites are mounted in a very handsome album, which will be on show at the Tea after the Meeting. Mr. Rawlings proposes to prepare a note for the Journal to indicate what is required for the photographic collection.

Mr. Rawlings has also taken charge of the stock of the Kew Guild Journal, which is quite extensive. He has brought it all together, put it in order, and prepared lists showing how many copies of each number of the Journal we have. As a result we now know that we have 3,416 copies of the Journal in stock, there being copies for every year from the first issue in 1893 up to 1960, though the number of copies varies greatly from one year to the next, the smallest being 5 (for two or three of the early years), It will thus be possible to make up five complete sets of the Journal. In addition to the stock of Journals, we have eight bound volumes covering the years 1893 to 1930. The back numbers of the Journal are available for sale and Mr. Rawlings will prepare a note for the next issue of the Journal setting out the position so that members will have an opportunity of making up their sets.

A request for back numbers of the *Journal* has been received from Professor Ewan of Tulane University, Texas, who wants them for bibliographical purposes, and it is proposed to offer for sale as many of the required numbers as are available.

The Committee is very grateful to Mr. Rawlings for the great deal of work he has done for the Guild during the year, and the Guild is greatly indebted to him for devoting so much of his time to putting our affairs in order.

(g) Christmas Cards. Owing to the very unseasonable weather during the past two winters, it has not been possible to have suitable new photographs taken, and the very limited stock available made choice difficult. However, Miss Ross-Craig has very kindly designed and made a drawing for a card larger than those produced hitherto, and it will sell at a higher price. The original drawing will be on view at the Tea (copy page 31).

Mr. Rawlings has brought together the stock of past Christmas cards, sorted it, and put it in order. It has come as a great surprise to find that there are no fewer than 3,052 cards in stock, covering seven different kinds and varying in number from 10 for a Snow Scene and 30 for the Orangery to 750 for one of the Queen's Cottage cards. The cards will be on show at the Tea and available for purchase. In view of the large number of cards in stock it is proposed to print only one card this year.

(h) Booklet about the Guild for new Students. The Committee's attention was drawn to the fact that no provision exists

for informing new Student-Gardeners about the Guild when they enter Kew, and the suggestion was made that a booklet about the Guild should be prepared for distribution to Students on their arrival at Kew. At the Committee's invitation Mr. A. J. Brooks very kindly drafted a short account of the Guild, and this, together with a list of past Presidents and the Rules of the Guild, has been arranged by Mr. N. J. Prockter for printing as a small booklet. It was hoped to have the booklet printed before the A.G.M., but in view of the fact that proposals for a change in the Rules, and the amount of the annual subscription, are to be put before the A.G.M., the printing has been deferred to ensure that the booklet is up-to-date.

(i) Organisation and Finance. It will be seen from the Guild accounts that the only items of expenditure are the printing of the Journal, stationery, postage, and menu-cards. No provision has ever been made for typing and duplicating, nor for the addressing of envelopes for the distribution of the Journal, and for the notices of the Annual Dinner and Annual Meeting, and the officers of the Guild have been left to provide these services as best they could.

During the past year the addressing of envelopes has been arranged by Mr. Rawlings and the work has been done by an Old Kewite Mr. W. D. H. Prior, now retired, and by Mr. Rawlings and his wife. The thanks of the Guild are due to these kind friends, and we are very grateful to them for their work, which has saved the Guild a considerable amount of money. It has to be borne in mind, however, that the Guild cannot expect this voluntary assistance to continue indefinitely and we must be prepared at any time to have to pay for the addressing of envelopes. So far as the typing of the *Journal* MSS., notices, minutes, annual report, and correspondence, and the duplicating of notices and minutes are concerned, the Guild must be prepared to pay. We must also be prepared to pay for the printing of tickets and menu-cards for the Annual Dinner. Provision for all these services will have to be made in future in the annual budget.

We have been trying to find some way of reducing the amount of work which falls on the Hon. Treasurer, and consideration is being given to the printing of membership-receipt cards with a duplicate half which can be detached and filed to provide a card index of paid-up members. For this too provision will have to be made in the annual budget.

This year there are two non-recurring expenses, namely a letter which it is proposed to send to all Old Kewites who have not paid subscriptions for the past two years, and the booklet which we are printing for new students.

It will be appreciated that the income derived from investments (\pounds 73 per annum) plus that yielded by a subscription of 7/6d. per annum (about \pounds 94 from 250 members) is plainly inadequate to

meet our liabilities, and the Committee therefore recommends that the annual subscription be raised from 7/6d. to 15/- per annum.

(j) Nominations. In accordance with the decision at the last A.G.M. it is necessary this year to elect a President-Elect as well as a President.

Dr. Hutchinson retires as Vice-President, having completed the two-year term of office : Mr. G. C. Johnson (Past President), Mr. R. A. Arnold, Mr. F. E. Eul, Mr. L. Stenning (who replaced Mr. Sealy) and Mr. A. Woodward leave the Committee, and Mr. V. S. Summerhayes is the retiring Hon. Auditor. To all these gentlemen the thanks of the Guild is due for their work. The Committee's nominations for officers and committee members were printed on the Agenda for the Meeting and will be found below (item 5).

(k) *Membership*. From the current Address List it can be seen that we have 322 Life Members (187 at home, 114 abroad, 17 addresses unknown, and 4 on the present Kew staff). There are, in addition, at least 737 others eligible for membership (409 at home, 185 abroad, 46 addresses unknown, and 137 on the present Kew staff). Of these only about 250 (130 Old Kewites and 120 on the present Kew staff) have paid subscriptions during the past two years, so that our total membership is about 570-580.

Many Old Kewites have not paid subscriptions for more than two years. Under Rule 6 the *Journal* is not sent to these people, and to all intents and purposes they are not members of the Guild. It is realised that in many cases the non-payment of subscriptions may be merely an oversight, and it has therefore been decided that a letter shall be sent to every Old Kewite who has not paid subscriptions for two years or more, asking that the arrears of subscriptions be paid, and pointing out that if no reply is received we shall conclude most regretfully that they no longer wish to be regarded as members of the Guild. This will make no difference to the Address List of Old Kewites for this will be maintained as complete as possible and include members and non-members alike.

Difficulties encountered in the application of Rule 2, which governs membership of the Guild, led the Committee to re-examine the whole question, and as a result the meeting will be asked to consider a change of Rule 2, the details of which have been printed in the agenda.

(1) Kew Guild Badge. The Committee's attention has been drawn to the fact that the badge now in use is of heraldic design, and that as such it is wholly unsatisfactory. The Committee has, therefore, decided to ask the Annual General Meeting to consider the question, and has placed on the Agenda two alternative proposals for remedying what can only be described as a most unfortunate state of affairs.

After the Report had been read, the President asked if anyone wished to comment on any aspect of the Report, but no-one did so and the meeting passed on to the next item on the Agenda.

3. THE GUILD JOURNAL.

Mr. Brown said he had nothing to add to the statement in the Annual Report, but would like to emphasise the need for members to send in notes, articles and information of general interest. In the long run the value of the *Journal* depended on what members contributed to it. Mr. Brown also drew attention to the importance of keeping the Address List up-to-date, and asked that changes of address be promptly notified; also, if anyone knew the address of any Old Kewite who was not in the Address List, he would appreciate receiving it.

4. FINANCIAL STATEMENT.

Mr. Stenning said that since the statement printed in the Agenda was prepared, a further donation of $\pounds 4$ 5s. 0d. had been received for the Jubilee Fund, and more subscriptions had come in. As a result the totals for the Jubilee and General Funds had been amended. The balances in the various Funds are therefore as follows: —

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	William Watson	ı Edu	cational	 158 1'	7	0	
	Matilda Smith	Mem	orial	 31 10	6	2	
	Dümmer Memo	orial		 55 13	8	0	
	Proudlock			 6 10	0	0	
	Benevolent	•••		 104	5	9	
	War Memorial	•••		 19	2	6	
	Jubilee	• • •		 1,069 13	3	5	
	General			 89	5	0	

Donations to the Jubilee Fund during the year totalled £48 13s. 0d. The Tea in 1960 showed a profit of £1 8s. 6d., but there was a deficit of £2 9s. 10d. on the Dinner this year. Christmas cards brought in a total profit of £16 4s. 4d., half of which goes to the Students' Association. The income from investments for the General Fund is about £73. Mr. Stenning said the balance in that Fund is the amount after paying for all our expenditures, including the *Journal*. Further revenue is due from advertisements and subscriptions and it is expected that the final total will be about £215.

Mr. Stenning then turned to the question of the expenses which the Guild must be prepared to meet for postage, duplicating, typing, etc., as mentioned in the Annual Report. The present income from subscriptions and investments was plainly inadequate to meet our liabilities, and the Committee had, therefore, decided to ask the meeting to authorise an increase in the annual subscription from 7/6d. to 15/-. On behalf of the Committee, Mr. Stenning then formally moved the resolution printed on the Agenda, namely: "That this Annual General Meeting authorises the increase of the annual subscription to the Guild from 7/6d. per annum to 15/- per annum." The resolution was seconded by Mr. Flippance, and the President then invited members to discuss the matter. Mr. Anwyl asked leave to move an amendment on behalf

of the Student Gardeners that they should pay a subscription of 10/- instead of 15/-: he pleaded that subscriptions to other bodies, expenditure in connection with lectures, and various other expenses placed a severe strain on the Students' finances. The amendment was seconded by Mr. Johnson, but the Secretary pointed out that technically the amendment was out of order, since under Rule 11 notice of it should have been sent to the Secretary 21 days before the Meeting and circulated by him 7 days before the Meeting. He suggested, however, that the difficulty could be overcome if the Meeting cared to suspend the Rules while this item was discussed, and Mr. Snowden thereupon proposed that the Rules be suspended; this was seconded by Mr. Sargent and unanimously agreed. Various speakers expressed sympathy for the amendment and on being put to the vote it was carried nem. con. The amended resolution was then put to the Meeting and carried unanimously.

Mr. McMillan raised the question of Life Members and asked if a circular could not be sent to them inviting them to pay subscriptions to the Guild, since the great depreciation in the value of money during the last twenty years made the Life Membership fees of £2 and £3 of bygone days a wholly uneconomic proposition for the Guild. Mr. Stenning replied that just such a circular had been sent out some years ago, and as a result many Life Members had sent further subscriptions. A member suggested that lifemembership should be terminated and all members be called upon to pay the annual subscription. It was pointed out, however, that the Guild had a legal obligation to its Life Members, and that on no account could such a step be contemplated. Several speakers were in favour of sending out a further circular, but the Secretary drew attenion to the fact that the duplicating, envelopes, and postage would cost a fair amount of money, and suggested instead that a note be printed in the *Journal*, and this was agreed.

5. ELECTION OF OFFICERS AND MEMBERS OF THE COMMITTEE.

On behalf of the Committee, the President nominated, in turn, those whose names had been printed in the Agenda. Each nomination was put to the Meeting and carried unanimously, and the President formally declared that person elected. Those elected were : --

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Mr. W. J. C. Lawrence Mr. F. G. Harcourt Mr. C. F. Coates Mr. A. D. Schilling Mr. G. E. Brown Mr. J. R. Sealy Mr. M. Free Mr. J. R. Hibbert Dr. Keith Jones Mr. R. C. McMillan Mr. S. A. Pearce

Hon. Auditor

6. MEMBERSHIP.

Introducing this item the Secretary said that, as stated in the Agenda, the Committee had encountered difficulties in dealing with applications for Associate Membership and, moreover, several members of the Committee were strongly of the opinion that such membership was not in the best interests of the Guild. It had also been realised that under the present rules senior members of the office staff, who previously had been eligible for full membership and for election as officers and members of the Committee, were now eligible only for Associate Membership and could neither hold office nor serve on the Committee. As a result the Committee had discussed the subject at some length, and had then appointed a sub-committee to examine the whole question of membership in detail. This the sub-committee had done, and had reported back to the Committee which had then considered the matter again, and, as a result, had unanimously decided to lay before the Annual General Meeting the proposal that the present Rule 2 be deleted and replaced by the wording printed on the Agenda. The effect of this proposal would be to abolish Associate Membership and to define clearly which members of the Kew staff were eligible for membership. Most of the categories set out in the proposed new Rule were self-explanatory, but it might be as well to mention that Voluntary Students were those from other countries whose salaries were paid by their own governments, while the Scientific, Professional, and Executive staffs were those so designated in the Civil Service—Professional, for example, covered librarians, artists, and photographers, while the Scientific staff comprised the botanists and their assistants. On behalf of the Committee the Secretary then formally moved the resolution on the Agenda, namely: "That this meeting agrees that the present Rule 2 be deleted and replaced by the following : -

- 2a. Membership of the Guild shall be open to past and present Curators, Assistant Curators, Foremen Gardeners, Student Gardeners, and Voluntary Students (provided that they have worked in the Gardens for at least one year), and to past and present members of the Scientific, Professional, and Executive staffs at Kew.
 - b. In addition the Committee may admit to membership of the Guild any member of the Kew staff outside the categories set out in 2a who, by virtue of the signal services he or she has rendered to the Guild, is deemed worthy of membership of the Guild."

The resolution was seconded by Mr. Prockter, and the President then invited the meeting to discuss the matter. At the request of a member the present Rule 2 was read out by the Secretary. Major Flippance asked which members of the Kew staff were excluded by the new Rule, and the Secretary gave the following list: Improvers, Boys, Gardeners Grades I and II, Women Gardeners, Seed-collectors, Lorry and Motor-Mower and Tractor Drivers, Labourers, Cleaners, Cloak-room Attendants, Constabulary, Office

staffs below the rank of Executive Officer, Herbarium Preparers, and Museum Craftsmen. Dr. Hubbard suggested that Improvers might be included, but Mr. Anwyl stated that the Student Gardeners had considered this very carefully and had come to the conclusion that Improvers should be excluded since there was no certainty that they would continue in the horticultural profession and that some had, in fact, abandoned horticulture for other work. Mr. Milne-Redhead asked if the term Voluntary Student could be interpreted to include a student working in the Herbarium, but it was stated that it was not intended to include such people and the words "provided they have worked in the Gardens for at least one year" would exclude them. It was then suggested that the words "Voluntary Students" should be amended to "Voluntary Student-Gardeners" and this was agreed. After further discussion the President then put the amended resolution to the meeting in two parts, first 2a which was approved unanimously, and then 2b which was carried nem, con, --- most members voting for it and none against.

7. The Kew Guild Badge.

The Secretary recalled that at the last Annual General Meeting a proposal had been made that a board showing the names of the Presidents of the Guild should be obtained for the students' Common Room, which it was hoped would be provided when the new laboratories and lecture hall were built, and that the board should be embellished with the Guild badge. Mr. Prockter kindly made preliminary enquiries on behalf of the Committee, and it was pointed out to him that the badge is in the form of a heraldic device and as such is most unsatisfactory. The chief defects are that the bar across the badge is the "bar sinister", which often denotes bastardy, while the bar itself is gold with a silver edging, which is contrary to heraldic rules. This information was confirmed by Mr. G. Atkinson-to whom the President had referred the matter grounds, and the badge itself is so far out of favour with the present Students that the majority will not wear it, the Committee considered the question of replacing it. The Guild has had two badges. The first, illustrated in the Journal, Vol. IV, No. XXXII, frontispiece (1925), was designed by Mr. G. Atkinson to avoid all pretension to being a heraldic device. The second, designed by Mr. Frank G. Simmonds and illustrated in the Journal, Vol. V, No. XLII, frontispiece (1935), is one now in use. The Committee came to the conclusion that a new badge must be designed, and that the Annual General Meeting should be asked to consider the two possible courses of action set out in the Agenda, namely :---

- (a) to have a new badge which, like the first Kew badge, avoids all resemblance to a heraldic device; and
- (b) to ask the College of Arms to design an appropriate badge—this would cost the Guild about £170 if the College is satisfied that the Guild is a fit and proper body to receive a grant of arms.

The Secretary concluded by stating that the sum noted under (b) was one paid some time ago and that in all probability the presentday cost would be considerably higher. After this opening statement, the President invited the meeting to discuss the matter.

Mr. McMillan thought that a badge was of very little use to the Guild, and suggested that it was unnecessary, and in this he was supported by Mr. T. Everett who doubted if the badge was worn enough to be worthwhile. Mr. Anwyl, speaking on behalf of the Students, said that they wanted a badge, not only for its use by the sports clubs, but also for its value as a symbol of all that Kew meant to them; but that, with few exceptions, they disliked the present badge so much that they would not wear it, and they strongly supported the suggestion that the Guild should endeavour to obtain a grant of arms and have a properly designed badge.

A lively discussion followed from which it became evident that a badge was considered generally worthwhile, and that the right way to get a new one was to apply for a grant of arms. Mr. G. Preston asked where the money was to come from. The Secretary replied that the Committee proposed to appeal to members to subscribe whatever amount was needed, and he also reminded the meeting that if the Guild received a grant of arms, the arms could be used on Guild publications, Christmas cards, menus, stationery and so on. After further debate in which many members supported the provision of a badge for various reasons, though a few were still doubtful of its value, Mr. Campbell rounded off the discussion by stating that it was time the Guild put this matter in order and to apply for a grant of arms. The Secretary then suggested that a decision one way or the other could be taken if a resolution was put to the meeting in these terms : —

"That the Hon. Secretary be instructed to write to the College of Arms and apply for a grant of arms to be made to the Guild, and that if a favourable reply is received, an appeal should be launched for funds to cover the cost."

Mr. Johnson said he would be happy to propose the suggested resolution, it was seconded by Mr. Richards, and on being put to the meeting was carried *nem. con.* by the overwhelming majority of those present.

There being no items under "Any Other Business", this concluded the formal part of the Meeting.

The President then rose and said how much he had enjoyed his year of office and how grateful he was for the support of officers and members of the Committee. He congratulated the Guild on having as its new President so distinguished a Kewite as Mr. W. J. C. Lawrence, of whose work at the John Innes Institution everyone was aware, and whom he was delighted to have the opportunity of introducing to the Meeting. Mr. Lawrence, in a brief reply, said that the letter inviting him to stand for election as President came as a complete, and most pleasurable, surprise

and he would do all he could to prove worthy of the honour done to him. The President then introduced Mr. F. G. Harcourt, the President-Elect, whose distinguished service in the West Indies would be known to many members present at the Meeting. Mr. Harcourt said he was very proud to have been elected and was especially pleased to be the first President-Elect in the history of the Guild.

After this Mr. Stock rose and proposed a hearty vote of thanks to the President not only for conducting the Meeting so admirably, but also for all he had done for the Guild during his year of office—a proposal which was carried with great acclamation.

Finally the President said he would now declare the Meeting adjourned. He did this on the advice of the Secretary, for there was still one more duty he had to perform, namely, to present the testimonials to Mr. Campbell and Mr. Stenning during the tea. This properly formed part of the Meeting but it was thought it would be more appropriate in the more social atmosphere of the tea-party. The Secretary had warned him that if he closed the Meeting he also terminated his own term of office, so the Meeting would be adjourned until after the presentations, and in the meantime we would all go and have tea.

Tea was served in the large greenhouse in the Melon Yard to eighty-six members and guests. After tea, the President, having asked Mr. Campbell and Mr. Stenning to come forward, said that he was very happy to be able to conclude his term of office with so pleasant a task as making a presentation to them on behalf of He recalled that it was decided at the last Annual the Guild. General Meeting that the Guild should show in some tangible form its appreciation of all that Mr. Campbell and Mr. Stenning had done for the Guild during the long time they had acted as officers. Mr. Campbell for fourteen years as Hon. Secretary, and Mr. Stenning for twenty-eight years as Hon. Treasurer. The Committee had invited members to subscribe £75 to be divided between them in proportion to their respective length of service, and members had shown their gratitude and appreciation in no uncertain fashion by subscribing twice that amount. In presenting a cheque for £50 to Mr. Campbell, the President said that everybody was very glad to see him recovered from the illness which had struck him down so soon after his retirement, and on behalf of the Guild he wished him and Mrs. Campbell many happy years to come. To Mr. Stenning, to whom he presented a cheque for £100, the President said that twenty-eight years as Hon. Treasurer was a record not likely to be equalled and the Guild was very grateful for the way he had looked after its finances. He was sure that everyone would wish to congratulate Mr. Stenning on becoming Curator and would wish him a very successful term in that post. Both presentations were greeted with warm applause, and both Mr. Campbell and Mr. Stenning expressed their thanks and appreciation of the gifts and the good wishes that came with them,

THE ARMORIAL BEARINGS AND BADGE.

Armorial Bearings or "Arms"-always a shield with symbols of one kind or another and variously coloured-were originally used to identify kings, princes, nobles, and knights on the field of battle. They were in use in western Europe by the middle of the twelfth century and had become general by the end of that century. Only the person concerned and members of his family could bear the Arms; dependants and servants belonging to the household, and soldiers in the pay of kings, princes, and great nobles, wore a Badge, which might be part of, or based on the Arms, but which might be different. It would seem that Badges were in use even before Arms. Before the end of the fifteenth century Armorial Bearings were being granted to the Guilds or Fraternities of craftsmen and traders whose members had their distinctive Badges and also clothing, or livery, whence the presentday Guilds of the City of London-the City Companies-are, in fact, the Livery Guilds of London, and their members Liverymen. Colleges and schools likewise received grants of Arms and Badges at an early date, and so too did cities and towns. The practice has continued throughout the centuries and associations of many different kinds now-a-days have their Arms. That the Kew Guild should apply for a grant of Arms and a Badge is perfectly right and proper for we are an association of long standing and have much in common with the original Guilds, especially the aim "to promote mutual and friendly intercourse between past and present Kewites and to further their interests" as stated in our Rules. In England the granting of Armorial Bearings and Badges, and the designing of them, is the responsibility of the College of Arms, the chief officers of which are the Earl Marshal, the three Kings of Arms (Garter, Clarenceux, Norroy and Ulster), the six Heralds (Lancaster, Somerset, Chester, Richmond, Windsor, York), and the four delightfully named Pursuivants (Rouge Dragon, Rouge Croix, Portcullis, and Bluemantle). It was, therefore, to the College of Arms that our application for a grant of Arms had to be sent, and, at the suggestion of one of our members, the letter was addressed to Bluemantle together with a note setting out briefly the origin, purpose, and history of the Guild. In his reply Bluemantle outlined the procedure to be followed and stated the costs-£152 10s. 0d. for the Arms and £67 10s. 0d. for the Badge. Upon receiving our agreement, Bluemantle took the first step, which was to obtain the permission of the Kings of Arms for our application to go forward to the Earl Marshal. This having been granted, Bluemantle then prepared the Memorial to the Earl Marshal which our President had to sign, and which read as follows : ---

My Lord Duke,

I have the honour to represent unto Your Grace that the Kew Guild was founded in the year 1892 by the Assistant Curators, Foremen and Student Gardeners of the Royal Botanic Gardens, Kew, co. Surrey. That the principal object of the said Guild is to promote mutual friendly intercourse between past and present members of the staff of the said Royal Botanic Gardens. That the management of the said Guild is vested in a Committee which Committee is desirous that Armorial bearings should be duly assigned to the said Guild with lawful authority and also a Badge or Device and has required me as President of the said Guild and on behalf of the same to request the favour of Your Grace's Warrant to the Kings of Arms for their granting and assigning such Armorial Ensigns as may be proper to be borne and used by the Kew Guild on seals or otherwise and also in the same patent such Badge or Device as may be proper for the said Guild to bear and use the whole being according to the Laws of Arms.

> I have the Honour to be My Lord Duke,

Your Grace's Obedient Servant.

(signed) W. J. C. Lawrence.

His Grace the Duke of Norfolk, K.G. Earl Marshal and Hereditary Marshal of England.

This was followed by the payment of the fees required by the College of Arms, and Bluemantle was then in a position to start work on the design of the Arms and Badge. He had told us that he was prepared to consider any suggestions that we might care to make and to discuss any ideas that we might have. We therefore enlisted the aid of Miss Ross-Craig, who besides being an artist also knows a considerable amount about heraldry, and we asked her to make suggestions for a design. As a result various ideas were brought together and preliminary sketches made, and subsequently Miss Ross-Craig and the Secretary discussed them with Bluemantle at the College of Arms. At this meeting Bluemantle made the first designs for both the Arms and the Badge, and from them he will make the designs which he will submit to the Guild Committee for consideration. At the time of writing, early January, 1962, we are still awaiting these designs.

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J. SEALY, Kew Guild Hon. Secretary.

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ANNUAL DINNER, 1961.

The Annual Dinner was held at the Chatham Restaurant, Victoria Station, London, with the President, Dr. C. R. Metcalfe, presiding and with 132 members and guests present.

Members found that an attractive menu had been arranged, consisting of Cream of Mushroom Soup—Fillet Sole Bonne Femme —Roast Turkey, Stuffing, Bread Sauce, Cauliflower Mornay, Cocotte Potatoes—Cassata Marguerite—Coffee.

After the meal the President proposed the toast of "Her Majesty the Queen". This was followed by Mr. F. Ballard who introduced the President with an account of his career. He stressed the great interest which Dr. Metcalfe had taken in the welfare of the student gardeners at Kew, and the great contribution which both he and Mrs. Metcalfe had made towards their social activities. When Mr. Ballard proposed the toast to "Our President" the gathering reacted with great sincerity. This was responded to briefly by the President.

Shortly afterwards the President rose to propose a toast to "The Kew Guild". Dr. Metcalfe described his experiences at Kew, many were amusing, some frustrating. After giving sound advice to the younger Kewites and student gardeners he made a forthright appeal to the Kew Staff to take an active interest in the Students' activities. One felt that Our President, surrounded by many problems in a particularly active term of office, was preparing Guild members for the challenging years which lay ahead. His words found a ready response among the audience, for it was an expression of the enthusiasm felt among members, who are determined to build on the traditions of the past and to carry the Kew Guild to even higher levels of achievement. A surge of unanimity spread through the gathering as Our President proposed the "Toast of the Kew Guild". Dr. Metcalfe has clearly signed the way to the future.

The toast to "Our Guests" was ably proposed by Mr. R. C McMillan, the well known and respected Parks Superintendent of Manchester. He introduced the guests—Mrs. Frances Perry, the well known author, journalist, educationist and broadcaster; Mr. Stuart Ogg, one of our leading nurserymen; and Professor L. J. Audus, Professor of Botany at Bedford College, London. Professor Audus replied to the toast.

The prizes were then presented by the President, as follows : —

The Hooker Memorial Prize—Mr. G. W. Ganney.

The C. P. Raffill Prize—Mr. D. J. Dyke.

The Mutual Improvement Society Prize-Mr. C. D. Sayers.

The Matilda Smith Memorial Prize-Miss J. L. Taylor.

"The Grower" Prize—was awarded to Mr. A. Pierce, but as he could not be present it was accepted on his behalf by Mr. P. W. Conn.

The Proudlock Cup (Men)—Mr. W. Lewis.

The Ladies' Cup was won by Mrs. Milne-Redhead who was unable to be present.

After dinner there was dancing until 11.30 p.m., but ample facilities, including a refreshment bar, were available for those who wished to talk and to renew old friendships. It was generally agreed that the evening was most enjoyable.

This may perhaps be regarded as an unorthodox account of an Annual Dinner—it is, however, an attempt to capture and express the feeling and enthusiasm of the gathering as a whole rather than to present a faithful and verbatim report of the speeches and proceedings. It is hoped that the large proportion of members who were unable to be present will appreciate this attempt, and that those who were lucky enough to be able to attend will be glad that it was made.

KEW GUILD RECORDS SECTION.

Members may be interested to know that the Kew Guild Committee have in their possession, some 2,800 back numbers of the *Kew Guild Journal*, ranging from the first issue, published in 1893, up to the present day. Anyone wishing to purchase odd numbers to complete their own volumes may do so for as little as 2/6d. per *Journal* for any year from 1893 to 1950 or 7/6d. per *Journal* from 1951 to 1960. Non-members wishing to purchase any back numbers may do so at the following rates : 1893 to 1950-5/- each; 1951 to 1960-7/6d. each. There are two complete sets of the *Kew Guild Journal* which may be purchased by Guild members for £10 5s. 0d. per set, or by non-members for £17 2s. 6d. per set.

At the time of going to press, we have in the records section, some 340 photographs of past Annual Dinners, Annual Groups and individual photographs of Old Kewites. We should be pleased to receive any photographic material dealing with Kew and Kewites, no matter how old, so please do not burn that photograph of yourself taken during your student days here at Kew way back in the dim and distant past. Please send it along for our records. All photographs and requests for back numbers of the *Kew Guild Journal* should be sent to me, c/o THE ROYAL BOTANIC GARDENS, KEW, RICHMOND, SURREY. Your requests, no matter how large or small, will receive my immediate attention.

S. W. RAWLINGS, Records Officer.

MUTUAL IMPROVEMENT SOCIETY.

The Annual General Meeting was held on September 5th, 1961, with Mr. G. E. Brown in the Chair. The following officers were elected for the year 1961/62 : Chairman, Mr. G. E. Brown; Vice-Chairman, Mr. L. Stenning; Hon. Secretary, Mr. D. Holmes; Hon. Assistant Secretary, Mr. D. Sayers; Hon. Treasurer, Mr. J. Souster; Committee Members, Mr. Whitehill and Mr. Maddox.

SECRETARY'S REPORT FOR THE 1960-61 SESSION.

The season was both enjoyable and successful with an average attendance of thirty-nine. Seventeen members gave full papers while eight delivered lecturettes. One of the high-lights was a lecture on the "Isle of Man" by Mr. E. J. Coward (1932). Kew defeated Wisley in the Annual Debate, this being held on home ground. Well over one hundred attended. The Cambridge Debate was held at Cambridge where we were made very welcome. It is a great pity that the "outside" debates are limited to two events.

For the first time in the history of the Society the task of judging for the C. E. Raffill Prize was left to an impartial committee consisting of the Chairman with two "neutral" members. Using a points system as a guide each paper was marked directly after the meeting closed. This year's prize was won by Mr. D. J. Dyke for his talk on "Sportsfield Construction". It is also fitting to record that the Iron Room was used for the last time by the Mutual Society on 20th March, 1961. The first meeting in the new lecture room in No. 2 Museum was held on 5th May, 1961, when Mr. A. McGeddes spoke on Horticulture in New Zealand. The Society was again invited to select a team for the "Barnes Brains Trust". The experience gained by the selected members was valuable, and it is hoped that this may be an annual event.

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

- The Hooker Prize (given annually by the Director and awarded to the member who is considered to have done the most to the help the Society)—Mr. G. W. Ganney.
- The C. P. Raffill Prize (given annually by the Curator and awarded to the best paper given during the session by an eligible member)—Mr. D. J. Dyke.
- The Society's Prize (raised by the subscriptions of members and awarded to the member who has taken the most active part in the discussions and debates)—Mr. D. Sayers.

The summer outings were well supported and were to : The Lea Valley Research Station ; Messrs. W. C. Slococks Nurseries, Woking ; The National Pinetum, Bedgebury and Col. Sir Frederick Stern's Garden at "Highdown", Sussex. The society will wish to thank Mr. Brown, the Chairman; Mr. Stenning, the Assistant Chairman; Mr. Souster, the Treasurer; Mr. Dyke, the Assistant Secretary; and the Committee Members, Mr. Schilling and Miss Rover. A special vote of thanks should be recorded to Miss Rover for the organisation of the catering for the Kew–Wisley Debate. Finally, I would like to thank all of the members that have given their support to a worthy society, and I wish my successors well in the seasons which lie ahead.

G. W. GANNEY, Hon. Secretary.

SYLLABUS-OCTOBER, 1960-MARCH, 1961.

Oct. ,, ,,	3 10 17 24 31	Plant Names Bench Grafting Techniques Notes on some Iris species	Mr. J. Souster Mr. B. Humphrey Mr. S. Linnegar
"	17 24	Notes on some Iris species	1 .
	24	incompany is a province and the second	Mr. C. Linnoger
			MIT. S. Linnegal
"	31	Villa Taranto	Mr. W. A. Gunn
,,		Commercial Fern Production	Mr. J. Banbury
Nov.	7	Botanising in Southern Africa	Mr. G. Briscoe
,,	14	Public Gardens in the Isle of Man	Mr. E. J. Coward, F.Inst.P.A., M.I.B.C.A.
"	21	Internal Debate	
,,	28	Some aspects of British Mountain Flora	Mr. A. Schilling
Dec.	5	Some Modern Aspects of Cacti Culti-	
		vation	Mr. D. Watling
"	"	The Cultivation of Bananas	Mr. L. Gibbons
"	12	The Training of Apple Trees	Mr. P. Bridgman
,,	19	Research Miscellaneous	Mr. J. Allen
196	-		
Jan.	2	The Commercial Production of Rock Plants	Mr. D. I. Dovor
	9		Mr. R. I. Beyer Mr. D. Dyke
>>	-	Sportsfield Construction The Cultivation of Narcissus	
"	16		Miss R. Caton
"	"	Comments on Plastic Flowers	Miss J. Taylor
22	23	Aspects of Carnation Growing	Mr. J. Simmons
,,,	"	The Production of Mustard and Cress	Mr. D. Anwyl
23	30	The Cultivation of Orchids	Mr. B. Hill
Feb.	6	Kew—Cambridge Debate—Messrs. M. Gabe and D. Sayers.	
**	13	Points on Rock Garden Construction	Mr. H. Van der Breggen
,,	,,	Synthetic Hormones	Mr. B. E. Lowe
,,	20	All-the-Year-Round Chrysanthemums	Mr. L. Foote
,,	27	Horticulture in America	Mr. F. Jayne
Mar.	6	Automatic Irrigation	Mr. D. Taber
"	13	Examination Technique	Mr. G. Ganney
,,	20	The Horticultural Advisory Service	Mr. T. Preston
,,	27	Kew—Wisley Debate— Messrs. A. McGeddes, B. Humphrey.	

KEW BOTANY CLUB.

Over the past year it has been particularly noticeable that, of those showing interest in the club, the larger percentage have been from the permanent Gardens staff and Herbarium members.

The winter lectures on the whole were well attended. We commenced with a talk on "Soils and Vegetation" by the late Dr. Turrill. Of the many interesting things learnt of this fascinating subject, the fact that the presence of Equisetum arvensis is often indicative of a gold deposit may well remain in the minds of many and be a good excuse for turning over the garden soil. A lecture on "Plants of Bog and Heath" by Mr. Meikle came next, particular regard being taken of local bogs as well as those of Ireland, upon which the speaker was evidently an expert. Dr. Dalby's talk on "British Aquatics" stimulated a great deal of interest and there were many requests for a trip to be organised to the Cambridge Fens. To round off, we had a talk and film show by Mr. P. Hunt on British Orchids. The subject was well presented with many of the smaller but important characteristics being illustrated.

The Annual General Meeting was held on the 11th April, 1961. Owing to the fact that no prize was awarded for a collection, the custom of the winner taking over the secretaryship could not be followed. On a show of hands Mr. B. Dodds was elected to the post. The following Committee Members were elected into Office : Messrs. A. G. Cook, M. Gabe, C. D. Sayers and D. Taber. Mr. D. Philcox remaining as Chairman.

Ten trips were arranged for the summer months, which on the whole were fairly well attended. However for the annual Orchid Trip we failed to fill even a twenty-nine seater coach, while on two others, namely to Hounslow Heath and to Staines Moor, our numbers did not reach over the half dozen mark. Perhaps this was due to the rather inclement weather? Of the trips that were very successful the one led by Mr. Reid to Burnham Beeches must surely stand out. A thick fog swirled round us adding more than an air of mystery to a trip into the dark, dank, beech wood in search of Pixy houses and other members of the Fungus Tribe. The trip down through the beautiful Kent countryside to Tonbridge Wells for a fern hunting expedition was very enjoyable. We had the only fine day in four weeks of cool and very wet weather; the sun shone for us all day, for which we all felt very thankful, probably none more so that our leaders Mr. C. Jermy and Mr. C. Stace, both of the British Museum. There was a trip to the Cambridge Fens for British aquatics led by Dr. Dalby of Imperial College, London. Our finds included many fine specimens of Utricularia vulgaris in flower, and several aquatic members of the genus Ranunculus. The other trips included one to Syon House under the expert guidance of Dr. Heine and two to Box Hill in the spring led by Mr. D. Philcox and again in the autumn led by Mr. B. Dodds. B. DODDS, Hon. Secretary.

STUDENTS AND IMPROVERS' ASSOCIATION.

This old established Association, which serves to further the interests of the present Students has had a year of progress under the Chairmanship of Mr. Anwyl. Over the years the Association has extended the scope of its activities which now include the task of accommodation for Students. The most difficult aspect of this work being that of conditioning landladies' minds to the peculiar needs and habits of the "Kew Students". The students also have the advantage of our own sickness benefit scheme which covers students for their first six months and has been extended to cover the two-year period.

Last winter saw the introduction of a study group, formed to assist students sitting for the National Diploma in Horticulture Examinations. We were fortunate in having the services of Mr. G. W. Ganney, N.D.H., a present student, who organised the group for the written examination sections, the practical section being covered by the Assistant Curator, Mr. G. Brown, N.D.H., to whom we owe our sincere thanks. We feel their efforts were justified by the success of 6 intermediate candidates and 1 final candidate in the General Section.

In response to popular demand arrangements were made for a number of lectures to be given by external speakers during 1961, as follows : —

- July 10th—Mr. R. Garner, East Malling (Research Station), on Budding and Grafting.
- July 17th-Mr. A. J. Harper, Parks Superintendent, Harlow, on New Town Development.
- Aug. 14th-Mr. Warwick, L.C.C., on Turf Management.
- Aug. 21st—Mr. D. K. Mann, Senior Consultant, Fisons, on New Developments and Techniques with Fertilizers.
- Sept. 4th-Mr. Scott-Walker, Representative on Cameron Irrigation.
- Sept. 13th—Mr. R. Garner, Director, Lea Valley Exp. Station, on Experiment work on Cut Flower Production.
- Sept. 18th—Mr. L. Pemberton, Lecturer at Swanley, on Bulb Forcing.
- Sept. 24th--Mr. R. Cropley, East Malling, on Viruses and Virus Diseases of Hardy Fruit.
- Sept. 29th—Mr. F. P. Knight, Director, Wisley, on Tree and Shrub Propagation.

As a record of a student gaining top average marks in the plant identification tests, a book purchased by the Association is presented to the Gardens Library in the student's name. The works to date are: --

October, 1960-March, 1961 :---

T. Preston, Modern Gardens, Shepheard.

April, 1961—September, 1961 : —

J. McRainey. Ornamental Cherries. Collingwood Ingram.

In addition to this, books to the value of $\pounds 20$ have been purchased and presented to the Library.

NATIONAL UNION OF STUDENTS.

Enquiries were made this year concerning membership of the N.U.S. It was hoped to affiliate our Association to the N.U.S., but with the Students' Course due for reorganisation it was thought prudent to wait for the new course before application was made.

However, the membership of individuals has been encouraged, and we must hope for the affiliation of our Association in the future.

SLIDE LIBRARY.

A collection of 35 mm. colour transparencies on horticultural subjects is to be established and housed in the Library for the purpose of visual reference.

Students and friends have been asked to donate slides; so may I take this opportunity of appealing to any Old Kewites outside the Gardens who would like to swell the collection of gifts to send them to : -

Students' Slide Library,

c/o Curator,

Royal Botanic Gardens,

Kew, Richmond, Surrey.

The Association has benefited by considerable support from the staff and students, and particularly Mr. G. Cook, Honorary Treasurer for the year, Mr. B. Humphrey, Committee Member, October, 1960—April, 1961, Mr. M. Baren, Committee Member, April, 1961—October, 1961, J. Woodhams, Improvers' Representative, and Kew Guild Representatives Mr. T. Preston, L. Gibbons, October, 1960—April, 1961, and to Mr. Anwyl, April, 1961—October, 1961. To whom my thanks are due.

J. B. SIMMONS, Hon. Secretary.

Whenever I read a Secretary's Report and he has thanked everyone for the part they played in the year's business I realise how much work goes into being a Secretary.

To bear the brunt of the routine is the hardest of jobs, and merits the sincere thanks and appreciation of us all.

RICHARD B. ANWYL.



CHRISTMAS CARD DESIGN

from an original drawing by

STELLA ROSS-CRAIG

Available for 1961, a number are left and can be sold for 6d. each. The card is not dated, it is folded and is of superior paper. Apply to Treasurer.

SPORTS AND SOCIAL CLUB, 1961.

The Club's success and general progress during 1961 was marred by the tragic death of one of its most active members and Football Secretary, Mr. John Stanley. Deepest sympathies are extended to his family.

Interest has been maintained in the social and athletic activities, and although one sport may temporarily disappear from the scene another rises to take its place. Both netball and mountaineering have stretched their wings this year and although the former has not yet left the ground the mountaineers have successfully reached the heights. There is certainly no apathy shown towards the more muscular activities this year, and members must be congratulated on their enthusiasm.

The Annual Dance was held for the first time at the Star and Garter Hotel, Richmond. The evening was a great success and many Old Kewites attended. Later dances have unfortunately been less well supported and most have resulted in financial loss. Nevertheless they all proved enjoyable not least for occasional activities of Dick Anwyl and chorus and the unsuppressible white Maori, Andy Geddes.

The Christmas Party was held on December 19th at the Jolly Gardeners', Isleworth. This attracted many members and, we are glad to say, many other non-student members of the Kew Staff. The evening was notable for its cabaret and for the high standard of fancy dress and tableaux. Mrs. Metcalfe, Dr. Hubbard and Dr. Bor kindly acted as judges, and the first prize was justly awarded to the T-range for their enactment of the book title "To Hell and Back"; the combined activities of angels and devils proved highly amusing.

On the more mundane side two points are worthy of note. During the year the Club became affiliated to the M.A.F.F. Sports and Social Association—a move which has made little difference to the general running of our club, but which may ultimately prove beneficial to us. Secondly, membership cards have now been produced for all subscribing members.

Election of officers during the year resulted in the following : President, Dr. C. R. Metcalfe; Chairman, Mr. C. D. Sayers; Treasurer, Mr. S. A. Pearce; General Secretary, Dr. K. Jones; Assistant General Secretary, Mr. R. Ward; Section Secretaries : Cricket, Mr. M. Theron; Soccer, Mr. J. R. Stanley (also Mr. H. Bell); Hockey, Mr. D. Holmes; Athletics, Mr. B. Dodds; Mountaineering, Mr. T. Schilling; Netball, Miss J. Pakham; Music, Mr. B. Bridgman; Photography, Mr. M. Tyas; Herbarium Representative, Miss S. Walton; C.M.I. Representative, Miss E. Hastings; M.A.F.F. Representative, Mr. R. Fender.

Finally the thanks of the club are due to Mr. N. Hickman, who retired from its chairmanship in the early part of the year to take up an appointment in Hull. We wish him well in his new post. We also wish to convey our gratitude to the many people who continue to support and encourage the club in all its activities.

KEITH JONES, Hon Gen. Secretary.

ATHLETICS SECTION.

KEW-WISLEY RELAY RACE.

The race was held on the 11th March. Kew's hopes could not have been placed high, for of the six runners, one had just recovered from influenza. With Dr. Taylor as "starter", the first seven runners lined up opposite the portals on Kew Green. The race was away to a fast start but by the end of Kew Road the runners were in one and twos. This was the pattern for the remainder of the race and though Kew's runners fought valiantly, putting everything they had and more into their laps, we only managed to come third with the time of 1 hr. 40 mins. 15 secs. The order of running was J. Warrington, D. Tabor, C. Henderson, A. McGeddes, B. Dodds and G. Ganney.

Wisley again took first place with a time of 1 hr. 37 mins. 46 secs., Writtle (who had entered for the first time) taking second place, and Kew in third place.

CIVIL SERVICE SPORTS DAY.

This was held at the Civil Service Sports Ground, Chiswick, on Tuesday afternoon, 11th July. Successes were gained in the following events : —

Athletic Section : --

High Jump, Ladies ... 1 mile, Men 4 x 110 yds, relay, Men 2nd place-Miss C. Gabriel.

3rd place-C. Henderson.

3rd place—team :

R. C. A. Barnett, H. Bell, A. Horrocks and A. J. Rose.

Tug-of-War ...

and the second second

Park & Contract of the

1st place—team :

R. C. A. Barnett, H. Bell, P. S. Brooks, F. G. Greenhough, W. A. G. Gunn, W. Lewis, H. L. Nunn and C. Henderson.

Points were awarded for successes in this section, the "Howell-Thomas" Cup being presented to the Division, Region, etc., scoring the highest total of points. The cup was won by the South-Eastern Region, with Weybridge as second and Kew in third place out of nine contestants.

Novelty S

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lovelty Section : —	
Shoe Race, Men	2nd place—M. J. Theron.
Sack Race, Men	1st place-D. Taber.
	2nd place—A. J. Rose.
Egg and Spoon Race,	<u>^</u>
Ladies	1st place-Miss C. Gabriel.
Three-legged Race	2nd place—Miss J. Lane and H. Bell.
Wheelbarrow Race	1st place Miss D. Oliver and M. Evans.
Obstacle Race, Ladies	2nd place—Miss D. Oliver.
Obstacle Race, Men	2nd place—A. J. Rose.
laama Taramta .	

Team Events : ---

Netball—Kew's team played three matches, lost two and drew one. They finished in third place in their pool.

Football—Kew's team was eliminated from the six-a-side competition in the first round, losing to the Cambridge Office team by an odd corner.

Cricket—Kew's team won the Cricket Trios competition. Team: W. T. Preston, G. W. Ganney and J. A. Maddox.

Trophies Gained.

The Gardens now hold two of the Ministry of Sports Association trophies, namely the Tug-of-War Cup (retained for the second year) and the Cricket Cup; this doubling our collection of trophies.

ROUND THE GARDENS RACE.

The date of this race was brought forward to the 5th October to make use of the better light conditions. It was a pleasant evening as the eleven competitors lined up opposite the Orangery to do battle for the Inter-Departmental Cup, presented to the winning team. (The first prize is a miniature silver cup, the second a silver medal and the third a bronze medal). A crowd collected to cheer the competitors on, whilst several members kindly acted as guides at various points on the 2.8-mile course.

Results: The first two runners scoring in each team : --

1. Arboretum N.:			
E. A. Williams		1	14 mins. 37 secs.
B. W. Croston		8	17 mins. 08 secs.
2. Alpine and Herbaceous	:		
D. A. V. Morgan		6	16 mins. 36 secs.
D. H. Holmes		7	16 mins. 49 secs.
3. T. Range:			
D. W. Taber		4	15 mins. 48 secs.
J. A. Maddox		9	17 mins. 09 secs.

4.	Temperate House :			
	D. M. Norris		3	15 mins. 31 secs.
	M. J. Theron		10	18 mins. 41 secs.
5.	Tropical Pits :			
	J. B. Gaggini		5	16 mins. 02 secs.
	H. Bell		11	18 mins. 42 secs.
6.	Flower Garden :			
	C. Henderson	•••	2	14 mins. 58 secs.

CLOG AND APRON RACE.

The race was held on 12th October at 5.30 p.m., with the length of the Broad Walk as the course.

Nineteen competitors lined up under "starters orders" to take part in this noble event. Spectators made sure they kept well clear of the flying clogs, for woe betide any who should venture into their path; once mobile it takes more than a little to stop the clog-shed, apron-girdled participants. Out of the mêlée J. Warrington emerged first to claim the miniature silver cup, with C. Henderson second winning a silver medal, and J. Gaggini as third winning a bronze medal.

Our thanks are due to Dr. C. R. Metcalfe, President of our Sports and Social Club, who takes a full interest in our activities and who kindly presented the prizes at our Christmas Party, and to Mr. M. Tyas (Photographic Secretary) who photographed the various races. The Inter-Departmental Cup for the Round the Gardens Race is in future to be displayed in the Gardens Library.

B. DODDS, Hon, Secretary.

HOCKEY SECTION

The season (up to the end of 1961) is proving to be very enjoyable. We have been fortunate in having sufficient keen players, due largely to encouragement given by Dr. Keith Jones. A number of newcomers to the game have become very good players, and, as a result, there has been a general "all-round" improvement and we are proud to record a victory over the Merrist-Wood Farm Institute (6-2).

The task of selection has not been an easy one, for apart from one or two bad patches when most of the good players were on duty, it has often been difficult to select because so many have been eager to play.

Working as a team we have gained immensely from the comradeship, from meeting others to make new friends and, of course, from the increased general fitness which all have felt. The mixed games are very popular and one feels that much is gained with the herbarium and gardens staff being brought together in sport. It is unfortunte that Kew does not possess its own sportsfield, for the matches could then be held on more convenient days. Special mention must be made of our Captain, Mr. Walter Lewis, who has played regularly despite the fact that he is a resident student at Merrist-Wood Farm Institute.

New members are always welcome, no matter if they have never played the game. They will find, as many others have, that hockey is a most enjoyable sport.

D. HOLMES, Hon. Secretary.

CRICKET SECTION.

Although the 1961 season was not outstanding it should be remembered for the very fine cricket played by Geoffrey Ganney, Trevor Preston and John Maddox at Chiswick on 11th July, when the Ministry Social Association held their Sports day. In the Trios Cricket Competition for the Cricket Challenge Cup these players beat the Guildford Divisional Office by 62 runs to 47 runs thus bringing the trophy to Kew.

Throughout the season it became increasingly difficult to make up a strong team, for staff shortage has led to extra weekend duties, while with the introduction of a five-day week many prefer to spend the long weekends at home. Of the fourteen matches arranged for the season, Kew lost 7 and won only 4. Three matches had to be cancelled because of the shortage of players.

Kewites will be pleased to learn that we defeated the R.H.S. Gardens, Wisley, at home and away in two very determined matches. At Wisley our score was only 44 runs, but owing to the accurate bowling of J. Maddox and T. Preston our opponents succumbed for 38 runs. In the return match on the Green, Kew scored 67 runs and Wisley replied with 41 all out.

The match played against Cambridge Botanic Gardens on Kew Green proved to be a very grim struggle. Cambridge batted first, and scored 177 runs, their opening bat Warren making 60. Kew managed to reach a total of 72 runs before going under to the bowling of Warren, Orris and Fleigner. As far as Kew were concerned, only the batting of the late John Stanley is worth comment. His 23 runs, scored in half as many minutes, proved to be the most entertaining cricket provided by the Kew men. Our bowlers must surely remember their exhaustion at the close of the match.

The Students were heavily defeated in their annual match with the Old Kewites, played on Kew Green. In defence of the Students it is only fair to point out that in actual fact they were defeated by one, D. Pringle, who scored 101 runs, and also took a fair number of our wickets. The Old Kewites generously declared at 155 for 2 wickets, and proceeded to dispatch the Students for 33 runs. Students working under Mr. I. Beyer, a foreman in the Alpine and Herbaceous Department, who scored 17 runs for the Old Kewites, were, I am told, relieved when the football season started.
Trevor Preston ended the season with the highest batting average, 17.6, and John Maddox who bowled exceptionally well throughout the season, topped the bowling averages.

Finally, I would like to extend my thanks to the team's Captain and Vice-Captain, G. Ganney and T. Preston, and all the players and helpers who made my term of office as Secretary such an enjoyable one. JOHN WARRINGTON, Hon, Secretary.

PHOTOGRAPHIC SECTION, 1961.

This season marked the introduction of a photographic competition. Held in the autumn, the competition was divided into Class 1, Plant Portrait and Class II, Pictorial subject. The first prize in Class I was generously donated by Mr. S. Rawlings. The second and third in Class I and the first, second and third in Class II were provided by the Sports and Social Club.

A total of one hundred and eleven colour transparencies were submitted and these were judged by Mr. S. Rawlings, A.R.P.S. and Mr. T. Clemo, A.R.P.S. An interesting evening ensued when the winners were announced and the entries projected and criticised by the judges.

The first prize in Class I was won by A. R. Mitchell with an excellent transparency of *Tavaresia grandiflora*. This prize is to be presented at the 1962 Kew Guild Dinner. Second and third prizes in this class were won by Miss McCullam Webster and R. C. Wand.

First prize in Class II was taken by M. Theron with a most effective photograph of old village houses, entitled "The Old World". M. Theron also took the third prize. The second prize being won by J. Aldous. Prizes given by the Sports and Social Club were presented by Dr. C. R. Metcalfe at the Christmas Party.

It is hoped to establish the competition as an annual event, and in future entries for Class I will be limited to students only.

During October a coach was hired and members visited Sheffield Park, Sussex, the National Trust property renowned for its autumn colour. Cameras were at the fore and although the weather was not ideal for photography some good results were obtained.

An illustrated talk on Austrian Alpine Flora was given by C. D. Sayers. Students have also shown slides of holidays including touring in Spain and climbing in Austria.

Winter photography in the gardens has been stimulated by the use of the new "Kodachrome". Advantage was taken of the unusual fall of snow in late December which transformed the gardens into the pictorial photographers paradise.

M. TYAS, Hon. Secretary.

FOOTBALL SECTION.

It became evident at the start of the autumn season that the Hockey Section would claim the more athletically minded students. However, the Park Administration College, The Grotto, instituted a 6 a side competition for a cup which they would present, to be competed for by Kew, Wisley and The Grotto, on a home and away basis. Kew played the Parks Administration at The Grotto losing 6—2. Thereafter it became impossible to raise a team and also have available a ground on which to play the home fixture ! It is intended to complete the fixtures at The Grotto in the coming year. H. BELL, Hon, Secretary,

MOUNTAINEERING CLUB REPORT.

The Mountaineering Club came into being at the Annual General Meeting of the Sports and Social Club on September 14th, 1961.

To date the Club has had two very well supported meetings in the mountains of North Wales. An active programme is planned for the 1962 season, the first outing being to Wales or the Lake District for the purpose of snow and ice climbing. It is also hoped to organise a small party of the more experienced members of the club for a climbing tour in the Austrian Alps this coming July. A combined trip with the Botany Club has also been suggested in order to study the mountain flora in certain areas of Wales, this will probably take place at Whitsun.

We have every reason to believe that future support for the club will be forthcoming. Several persons have shown amazement at our willingness to drive 500 miles in a weekend only to sleep under canvas. However, at the time of going to print the membership is growing rapidly and we hope it will continue to do so. A. D. SCHILLING, Hon. Secretary.

MUSIC CIRCLE.

Despite the very full lecture programme it was decided to continue the meetings throughout the summer, as far as possible on alternate Tuesdays. Contrary to expectations attendances were very encouraging, particularly during July, when seating accommodation was stretched to its utmost ! The Social Club generously supported the purchase of another gramophone ticket, this time with Chiswick Library, which keeps its records in excellent condition. As a result programmes were more varied and a higher standard of performance made possible. Members own record collections also helped towards programme building.

In selecting programmes the tendency has been to play the less often performed works of the well known composers, and the better works of the lesser known composers. Albinoni, Scarlatti, Cimarosa, Bruckner, Mahler and Vivaldi being among those represented. Quite a few chamber works have also been included, the whole being very well received. Our grateful thanks are once again due to Dr. and Mrs. Metcalfe for their wonderful hospitality and for generously supplying such excellent refreshments. Members appreciation for this is reflected in the large sums of money regularly collected in the box for Dr. Barnardo's Homes. We must also thank Mr. and Mrs. Heawood for always being ready to act as hosts for us whenever Dr. and Mrs. Metcalfe have been unable to do so.

CAROL SINGING

Carol singing this year was again very successful, aided by a capable clarinetist. The weather was fortunately dry for both occasions, but was very cold and icy on the second. £8 was collected for the "Pestallozzi Children's Village" at Sedlescombe, and £13 7s. 0d. for Dr. Barnardo's Homes.

Thanks are once again due to Mrs. Heawood and Mrs. Metcalfe for providing much needed refreshments on respective occasions. P. T. BRIDGMAN, Hon. Secretary.

IN APPRECIATION.

As you will have read from the reports, the activities of the Sports and Social Club have widened. All the sections are well supported, which reflects the excellent organising ability of the Secretaries, for, of course, unless it is well done interest will be lacking.

A Christmas draw has been held this year and was a most successful venture. A draw involves a considerable amount of very tedious work for the promoter and I should like to record the appreciation felt by members of the Club to Mr. David Taber for his sterling effort and the proportionate increase in the Club's funds.

Lastly, we, the Committee, thank members for their support and ask that a special effort be made to attend *ALL* the dances in 1962. C. D. SAYERS, *Chairman*.

WEDDING BELLS

Mr. P. A. C. Tebby (1953) to Miss M. Knight at St. Anne's Church, Kew Green.

Mr. R. B. Anwyl (Student) to Miss M. Towes at Kenley Methodist Church, Surrey, on 16th September, 1961.

Mr. B. Humphrey (1961) to Miss J. Taylor (1961) at Eastbourne on 8th September, 1961.

Mr. M. Gabe (Student) to Miss C. Edgar (Woman Gardener) at Methodist Church, Kew, on 16th September, 1961.

*Mr. M. Tyas to Miss A. Petrie at Dewsbury Meeting House, Yorkshire on 18th March, 1961.

*Mr. J. Maddox (Student) to Miss M. Whittaker at St. Michael's Church, Coventry, on 18th March, 1961.

Miss H. Rover (1961) to Mr. B. Selp on 2nd December, 1961. *Married just before coming to Kew as a Student.

LAWN TENNIS CLUB.

The summer was a reasonably dry one and after a rather slow start, attendance at the courts was fairly enthusiastic. Play was possible on most "Club Nights" and rain prevented play on only two Saturdays, one of which was unfortunately the day arranged for an American Tournament. There was a slight increase in membership and the club was happy to welcome a number of young newcomers, including several students.

Dr. M. Y. Stant was elected Secretary in place of Mr. E. Milne-Redhead, to whom the Club is deeply indebted for his services in the past. He had been Secretary for five years and during this period had devoted considerable energy to the Club's affairs. Fortunately the Committee is still able to rely upon his experience and we are happy to note that he enjoys his game as keenly as ever and as frequently as other duties permit. The Treasurer, Mr. R. Claiden, controlled our finances with his usual flair, while Miss E. Hastings organised our refreshments most efficiently.

The members will also wish to record their thanks to Mr. S. W. Rawlings, for his excellent attention to the courts, which have been greatly improved during the last few years by regular treatment with weed-killer and fertiliser. This work continues under the supervision of the newly-appointed Assistant Curator, Mr. G. Yates, and we are grateful to him also. The prompt provision of watering equipment during the dry period in June was greatly appreciated and helped to maintain the turf which Mr. C. Preston kept well-lined throughout the summer, in spite of the occasional deluge.

Three match fixtures were played, all resulting in victories for Kew, 8—1 against Queen Elizabeth College; and 6—3, 6—3 against the Natural History Museum. The return match with Queen Elizabeth College was regrettably postponed and it was not possible to arrange fixtures with any of our other traditional "foes" this season. There was a good number of entries for the Proudlock Tournament, the Cups being won by Mrs. J. Lewis and Mr. W. Lewis (just friends !) after some lengthy battles. Dr. M. Y. Stant and Mr. R. Claiden were the runners-up.

To sum up, it has been an enjoyable and not unsuccessful season, unhappily marred by a very sad sequel. The club is very grieved to lose Mr. John Stanley, a most promising player and one of the keenest young members.

MARGARET STANT, Hon. Secretary...

We present our sincere apologies for the error which occurred with the group photograph—"At the Parks Convention of Victoria, Australia, 1958" on page 808 of the 1960 *Journal*. The members names should be read—*Left to right* :—

J. LAWSON (1927) Supt. Electricity Com.

P. TREVASKIS (1927) Supt. Dept. of Public Works, Victoria. T. R. N. LOTHIAN (1940) Dir. of Bot. Gar., Adelaide.

KEW GUILD GENERAL ACCOUNT, 1961

		1.1	1.1.1				
RECEIPTS	£	s.	d.	EXPENDITURE	£	s	d.
Balance from 1960 a/c	216	18	8	1,000 copies of Kew Guild Journal	262	8	6
Annual subscriptions and arrears		13	0	500 Envelopes, Croxley, including			
Donations		11	0	purchase tax	1	9	5
Additional life subscriptions	76	19	6	10 H.T. Blocks	19	14	1
Advertisements in 1960 Journal	104	12	0	1,000 copies of Index	14	17	6
Dividends- £26 6s. 3d. 31/2 War				1,000 circular letters	2		0
Stock		18	4	1,200 circular letters	4	4	0
Dividends-£500 3% War Savings				2,000 envelopes, including tax	3	11	5
Sir A. W. Hill's bequest	15	0	0	1,000 sheets headed paper, includ-			
Dividends—£220 41% Defence				ing tax	3	15	6
Bonds, W. H. Judd's bequest	9	18	0	400 copies of Agenda for Annual			
Dividends-£295 3% Savings				Meeting	3	15	0
Bonds (Jubilee Fund)	9	18	0	Insurance on Proudlock Tennis			
Dividends £220 31% Defence				Cups		7	
Bonds (Jubilee Fund)	7	7	0	Engraving Tennis Cups		10	6
Dividends—£395 41% Defence				Typing reports, minutes of meet-			
Bonds (Jubilee Fund)	18	3	6	ings, letters, etc	9	0	0
Dividends—£160 5% Defence				Postage on home and overseas			
Bonds (Jubilee Fund)	9	11	10	Journals	14	6	6
Sale of Christmas Cards	45	12	0	Secretary's, Editor's and Treasurer's			
Balance from Tea		7	0	Postages		2	
Grant of Arms and Badge	139	12	0	Grant of Arms and Badge	220	0	0
				Students and Improvers' Social			
				Association-Half the balance			
and the second				from Christmas Cards	2	7	9
				2,000 Christmas Cards, 4,000 En-			
	- (p. 1			velopes, including Purchase and			
				Surcharge Tax		16	
2334332 (21)				H. J. Rowling & Sons, Ltd.		18	3
				Deficit on Dinner	2	14	1
and the second	* 1			Balance in Post Office Savings			-

£818 1 10

KEW GUILD CAPITAL ACCOUNT

Bank

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Balance in Barclays Bank Balance in Cash ...

... ...

EXPENDITURE

Refund—R.H.S. Examination Fees to Mr. P. Bridgman Balance in Post Office Savings Bank

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LIABILITIES	£	s.	d.	ASSETS £	s.	c	1.
Life Subscribers				£300 Post Office Savings Bank, 300) ()	0
60 at £1 at half rate	- 30	- 0	0	£26 6s. 3d. $3\frac{1}{2}$ % War Stock 20	56	5	3
153 at £2 at half rate	153	0	0	£500 3% War Savings-			
102 at £3 3s. 0d. at half rate	160	13	0	Sir A. W. Hill's bequest 50	D 0)	0
5 at £5 5s. 0d	26	- 5	0	£220 4½% Defence Bonds—			
Assets exceed Liabilities	1041	10	0	W. H. Judd's bequest 22	b 0)	0
				Valuation of Journals in stock 18	D 0)	0
				Balance in Bank and Cash 18	51	L	9
						_	
£	1,411	8	0	£1,41	18	3	0

£1,411 8 0

WATSON MEMORIAL EDUCATIONAL FUND

RECEIPTS	£			
Balance from 1960 a/c	158	17	0	
Dividends on £100 31% War. Stock		10	0	
Interest on Post Office Savings Bank	3	18	7	
-				

£166 5 7

(Assets-£100 31% War Stock and Balance in Bank, £158 17s. 0d.)

MATILDA SMITH MEMORIAL PRIZE FUND

Balance from 1960 a/c	£ 33 1	18 10	2	EXPENDITURE Prize awarded to J. L. Taylor Balance in Post Office Savings Bank		2	d. 0 10
	£36	4	10		£36	4	10

(Assets-£50 3% Savings Bonds and Balance in Bank, £34 2s. 10.)

DUMMER MEMORIAL PRIZE FUND

RECEIPTS Balance from 1960 a/c Dividends on £70 4% Funding Loan Interest on Post Office Savings Bank		18 16	1	EXPENDITURE Balance in Post Office Savings Bank	£ 60		
•			_	· · · · · · · · · · · · · · · · · · ·			_
	£60	2	3	· · · · ·	£60	2	3

(Assets-£70 4% Funding Loan and Balance in Bank, £60 2s. 3d.)

41

133 18 7

£818 1 10

£ s. d.

7 7 0 158 18 7

£166 5 7

49 8 10

1 14 4

THE PROUDLO	CK PRIZE FUND
RECEIPTS £ s. d.	CK PRIZE FUND EXPENDITURE £ s. d. Nil 7 i. d. Balance in Post Office Savings Bank 7 13 5
Balance from 1960 a/c 6 10 1	Nil
Dividends on £25 4% Funding Loan 1 0 0	Balance in Post Office Savings Bank 7 13 5
Interest on Post Office Savings Bank 3 4	
£7 13 5	£7 13 5
(Assets-£25 4% Funding Loan and Balance in	n Bank, £7 13s. 5d.)
THE BENEV	OLENT FUND
RECEIPTS £ s. d. Balance from 1960 a/c. 109 10 9	EXPENDITURE £ s. d.
Balance from 1960 a/c 109 10 9	Donation of £5 5s. 0d. to an Old
Interest on Post Office Savings Bank 2 14 6	Kewite 5 5 0 Balance in Post Office Savings Bank 107 2 9
£112 7 9	£112 7 9
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KEW GUILD WAR	MEMORIAL FUND
RECEIPTS £ s. d.	EXPENDITURE £ s. d.
Balance from 1960 a/c 19 2 6	Nil p
Interest on Post Office Savings Bank 9 6	MEMORIAL FUND EXPENDITURE <u>f</u> s. d. Balance in Post Office Savings Bank 19 12 0
£19 12 0	£19 12 0
· · · · · · · · · · · · · · · · · · ·	
VEW CITED DINK	ER, 23rd MAY, 1961
KEW GUILD DINN Hold at the District Defresh	nent Rooms, Victoria Station
RECEIPTS £ s. d. Sale of Tickets—	EXPENDITURE £ s. d. British Transport Catering
106 at £1 2s. 0d. each 116 12 0	Services—
22 at £1 0s. 0d. each 22 0 0	133 Dinners at 17/6 each 116 7 6
· · · · · · · · · · · · · · · ·	10% gratuities 11 13 3 Refreshments for Band, etc 1 14 7
Doorman and M.C $2 14 11$	Performing Rights 10 6
	Fee for M.C 880
	Menu Cards 1 8 1
	Commissionaire 1 5 0
£141 6 11	£141 6 11
KEW CHILD TEA 26th A	UGUST, 1961, Held at Kew
KIN GUILD HEA, 2011 A	to o o o i i i i i i i i i i i i i i i i

RECEIPTS 88 Members paid 3/6 Tea	each	fo r 	£ 15	s. 8	d. 0	T
		•	£15	8	0	-

G (51,	EXPEN	IDITU	IRE		£	s.	d.	
To John C 86 Teas Balance				td.— 	15	1 7	0 0	
					£15	8	0	•

KEW GUILD JUBILEE PERMANENT SECURITY FUND

RECEIPTS		£			
Carried forward from 1960 a/c.	1.,	,064	1	11	
Donations from 9 members re-					
ceived and gratefully acknowledge	ed	. 13	1	6	

EXPENDIT	URE		£	s.	đ.
Invested-					
3% Savings Bonds			295	0	0
$3\frac{1}{2}$ % Defence Bonds			220	0	0
$4\frac{1}{2}$ % Defence Bonds			395	0	0
5% Defence Bonds		• • •	165	0	0
Barclays Bank			2	3	5
				-	

£1,077 3 5

CHRISTMAS CARDS, SALES FOR 1961

RECEIPTS	£	s.	d.	
984 New Christmas Cards at 6d.				- 2
each	24	12	0	
1,680 Old Christmas Cards at 3d.		~	~	- 2
each	21	0	0	

	EXP	ENDIT	JRE		£	s.	d.
2,000	Christmas	Cards,	is, including				
	chase tax				32	3	2
	Envelopes				- 5	5	
	ircharge ta					12	0
2,000	Envelopes f	or Chris	stmas	Cards			
	uding purc				2	16	2
	its and Im	provers'	Socia	al			
	ociation			•••	2	7	9
Baland	e		•••		2	7	6
					£45	12	0

£45 12 0

£1,077 3 5

Audited and found correct-

G. H. PRESTON S. A. PEARCE Hon. Auditors.

KEW, ITS WEATHER AND PLANTS IN 1961.

"Sing a song of seasons, Something bright in all."

Robert Louis Stevenson.

January gave little promise of any break from the prolonged rains and floods of the previous six months of 1960, a year during which the rainfall was highest since 1883. The winter flowering subjects gave a perfect display, for seldom did the temperature fall below freezing point and the delicate blossoms of *Rhododendron mucronulatum* were produced to perfection during December, 1960, and January, 1961. By the end of the month drifts of snowdrops were in flower in the Queen's Cottage Grounds, while bold group of *Galanthus nivalis atkinsii* in the Rock Garden was admired by many. *Chimonanthus fragrans* and its varieties are also worthy of special mention, for the bushes were smothered in flower.

So into February and to the 14th of this month when a temperature of 67° F, was reached, the warmest February day of With Salix medemii bright with catkins which had the century. been plentifully produced upon the long growths made during the previous wet summer, one felt that the first touches of spring had arrived. Rhododendron strigillosum and R. praecox were in full bloom on the 27th and the first of the naturalised Narcissi nodded their "heads" in mild S.W. winds which chased low, heavy clouds across rain-filled skies. Thus we entered March, leaving behind a month which was officially placed on record as the mildest February for 90 years and with dykes which were really full—a rare occurrence in this month, despite the saying "February fill the dyke". March was unusually dry and an intensive effort was made to complete the delayed plantings before spring growth developed. The month was unusually mild but some frost was experienced and the blossoms of the early-flowering rhododendrons were severely damaged.

April was also mild but the wet conditions made the early mowings difficult. During May however the position was reversed and many of the surface rooting plants needed irrigation. The dry weather continued into June and Kew experienced a sunny month. Many tender trees and shrubs, which had survived the winter undamaged, owing to its mildness, flowered and extended their growth happily. Thus *Buddleia colvillei* produced its heavy panicles of deep wine flowers in the open border—a shrub which normally needs wall protection to flower as the large terminal flowering buds are usually killed unless some shelter is provided. Even the olive, *Olea europea* flowered and later bore partially developed fruits.

The warmest days came in late June and early July. On the 30th June for example there was sunshine from dawn to dusk and the Mount Etna Broom, *Genista aetnensis*, burst into blossom under a blue and cloudless sky, conditions which were reminiscent of those prevailing in its native lands in the sunny Mediterranean

On the 2nd July the heatwave ended with thunderstorms and heavy rains which spread from the west to the London area, but no appreciable quantity fell at Kew until 10 days later. July was relatively cool and cloudy, but it was a dry month and there was no real relief from the drought until August when there were many heavy thundery rainfalls. On the 8th August a strong S.W. gale did considerable damage and in addition to many limbs being lost two trees were blown down, one being a large beech tree.

The Autumn was rather warm with above-average temperatures into November. During the warm nights of early September dozens of Crane flies drove against lighted windows. The Nyssa sylvatica by King William's Temple coloured towards the end of September soon to be followed by Aesculus pontica, its large leaves turning a rich brown. October was wet, but with more than average sunshine, and under these conditions some really fine Autumn colour developed. This was at its best on Saturday, 21st October, a day which was clear and sunny. Under such perfect conditions, as one stood by the Sundial the view across the Arboretum allowed what was possibly the finest scenic effect of the year. It gave an impression of the vastness and variability of the great collections, for the trees then stood out from each other as relief was gained through their variation in colour, height and form. The feature of the year as far as Kew was concerned was the autumn colour. A corner of the Azalea Garden-the Lily Pond and the Prunus Collection were fine, to mention just three areas which provided a feast of colour. The Birch Collection was also spectacular. Betula lenta showed a jet black trunk and branch system which supported a cloud of deep golden leaves. As a contrast a nearby specimen of Betula hoseri (B. coerulea x B. lutea) stood with its large "poplar-like" leaves a soft pale yellow. Bright, too, was B. grossa, the glowing leaves and off-white trunk displayed to perfection against a dark background of box and holly. On the edge of this collection a small but shapely Nyssa sylvatica glowed a bright orange-red and was spectacular especially when viewed against the autumnal misty background provided by the large Elms near the Broad Walk.

But "leaves have their time to fall, and flowers to wither at the North wind's breath". In early November the temperature dropped appreciably as a cold northerly air stream spread southwards bringing with it sleet and snow, which reached as far south as Buckinghamshire. However, November was mainly dry and sunny giving the *Eucalyptus gunnii* in the Erica Garden an opportunity to flower, a fitting reward for this valiant if rather exotic tree.

With the 11th of December a maximum temperature of 59° F. was recorded, one of the warmest December days at Kew on record. It was just three days later that extremely foggy conditions prevailed—yet the varying weather conditions and seasonal changes each produce an effect with one or a number of plants

which offers a display of particular beauty to the mindful eye. Thus even under such gloomy and unhealthy conditions two familiar shrubs combined to produce an effect which is only possible in dense fog. The two were *Viburnum fragrans* with its dense cymes of white flowers, and *Symphoricarpus albus*, heavy with its white fruits. Growing side by side, all that could be seen was a mass of white heads shining through the misty gloom. A lovely effect, yet a much closer inspection was necessary to distinguish the flowering from the fruiting specimens. Both in the family *Caprifoliaceae* but far removed from each other in general effect under normal conditions.

The year's coldest weather developed in the last fortnight with hard frost, cold N.E. winds bringing the coldest Christmas Day for 90 years. The cold period was broken into by a short mild rainy spell when large areas of the Gardens, which are normally "dry" were covered by pools of water which had gathered on the frozen top soil. The old year went out with a recording of 23° of frost in the Arboretum Nursery and with the trees and shrubs of Kew weighed down under a four-inch layer of frozen snow.

PLANTS IN BLOOM IN THE OPEN AT KEW ON DECEMBER 31st, 1961.																
The daily maximum and minimum temperatures for December, 1961, are as follows																
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Max.	540	490	390	550	560	500	430	380	380	540	590	580	570	550	490	50°
Min.	370	300	240	370	450	290	240	270	360	390	540	530	440	340	300	330
Date	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Max.	470	340	50°	40 °	410	410	390	340	360	380	380	350	480	480	330	
Min.	28 °	230	230	290	380	340	280	250	290	310	230	22º	350	32º	14º	

We have included this feature page in the past four *Journals*, showing the plants in bloom on the 31st December of the years 1957, 1958, 1959 and 1960.

The task of compiling this list has proved to be a very pleasant one. However, on the last day of 1961 a blizzard raged for most of the day, abating as the light faded with the Gardens under a 4-inch mantle of snow. As there was little traffic the Gardens were strangely quiet, a contrast to the continuous roar which can usually be heard from its boundaries.

An attempt at compiling a list would have been foolhardy and ridiculous, but had not these conditions prevailed, there would have been fewer plants in bloom on this date than in previous years. Most of the "reliable winter-flowering shrubs" had been either retarded or severely mauled by the northern winds which introduced arctic conditions into our temperate gardens.

The ever faithful *Hamamelis mollis*, about to unfold its delicate crinkled petals was held in check for several days before the end of the year, but *Elaeagnus macrophylla*, usually in flower during October and November, was a few weeks later. The flowers, described by Bean as being "silvery scaly, shaped like a fuchsia, nodding, very fragrant", were neatly tucked away, protected by a canopy of snow and foliage.

RAINFALL AND TEMPERATURE READINGS FOR KEW IN THE YEAR 1961.

	Rainfall in	Temper Maximum	ature (in Fahre Minimum	enheit) Grass
Month	Inches	Av.	Av.	Av.
1961				
January	 2.43	45°	34°	31°
February	 2.24	52°	41°	37°
March	 .08	59 °	37°	34 °
April	 2.13	60°	44°	40°
May	 .84	64°	45°	42°
June	 1.15	72°	50°	46 °
July	 1.32	72 °	54°	50°
August	 2.26	71°	54°	50°
September	 2.35	70°	54°	50°
October	 2.14	61 °	45°	41°
November	 2.10	51°	39°	35°
December	 2.68	45°	32°	27°
T-t-1	21.72			
Total	 21.72			

POSITIONS TAKEN BY STUDENTS LEAVING KEW.

STUDENTSHIP ENDING MARCH, 1961.

Briscoe, G. E. D.	Assistant District Supt., Johannesburg Parks Dept., S.A.						
Caton, Miss R. A.	Scientific Assistant, Lea Valley Research Station.						
Foote, L. A. Gibbons, L.	Horticultural Assistant, Beckenham Parks Dept. Foreman, Salford, Leigh, Manchester.						
Humphrey, B.	Student, Writtle.						
Lowe, B. E.	Student, Parks Administration College, January, 1962.						
Low, J. J. D.	Student, Parks Administration College, January, 1962.						
Martin, B. A.							
Taylor, Miss J.	Married.						
Van der Breggen, J. D.	Foreman, L.C.C. Parks Dept.						

STUDENTSHIP ENDING SEPTEMBER, 1961.

STODERTSTILL ENDER, 1901.					
Allen, J.	Assistant, Landscape Firm.				
Banbury, J. N.	Lugano, Switzerland.				
Dyke, D. J.	Technical Assistant, L.C.C. Parks Dept.				
Ganney, G.	N.A.A.S. Officer, Fairfield Research Station.				
Gunn, W. G.	Assistant Supt., Johannesburg Parks Dept., S.A.				
Hill, B.	Technical Assistant, Newcastle Parks Department.				
Preston, W. T.	Student, Parks Administration College, January, 1962.				
Rover, Miss H. J.	Married.				
Schilling, A. D.	Foreman, Arboretum Nursery, Royal Botanic Gardens, Kew.				
Simmonds, J. B.	Foreman, Tropical Prop. Dept., Royal Botanic Gardens, Kew.				

PREVIOUS POSITIONS OF STUDENTS ENTERING KEW DURING 1961.

Oct.	Bauman, R. C.	Longwood Gardens, Kennet Square, Pennsylvania,				
April	Bell, H.	Sheffield Parks Dept. U.S.A.				
Oct.	Breach, D. J.	Oxford Botanic Garden.				
April	Brooks, P. S.	Southend Parks Dept.				
Oct.	Fellows, K. M.	Manchester Corporation Parks Dept.				
Oct.	Gaggini, J. B.	G. Reuthe, Ltd., Tree and Shrub Nursery, Keston.				
Oct.	Griffin, M. J.	Brighton Parks Dept.				
Oct.	Highmam, J. D.	Liverpool Parks Dept.				
Oct.	Leaver, G. J.	Willenhall Parks Dept.				
April	Maddox, J. A.	Coventry Parks Dept.				
Oct.	Mason, C. D.	Scarborough Parks Dept.				
Oct.	Mitchell, A. J.	Bolton Parks Dept.				
April	Rahman, F.	President's Garden, Pakistan.				
Dec.	Ralston, D. W.	Glasgow Parks Dept.				
April	Rose, A. J.	Portsmouth Parks Dept.				
Oct.	Smith, J. D. H.	University Botanic Garden, Cambridge.				
April	* Stanley, J. E.	Cleethorpes Parks Dept.				
April	Theron, M. J.	Johannesburg Parks, Dept., (or temporarily J. Waterer, Sons & Crisp, Bagshot.)				
April	Tyas, M.	Yorkshire Institute of Agriculture.				
April	Ward, R. C.	W. C. Slocock, Ltd., Woking, Surrey.				
April	Woolliams, K. R.					
* Unfortunately we must refer the reader to the Obituary pages.						

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NOTES AND GLEANINGS.

"The chief object of the Guild is to 'watch' and record the careers of its members." W. J. Bean.

In the New Year Honours (1962) a knighthood was conferred on the Director, Dr. G. Taylor.

Miss M. I. Skan has been made a Member of the British Empire in the New Year Honours (1962).

Mr. S. H. A. Marshall, recently retired as Librarian, was made a Member of the British Empire in the June Birthday Honours List (1961).

Mr. T. R. N. Lothian, Director of Adelaide Botanic Gardens, was admitted to the Order of the British Empire in the June Birthday Honours List.

Mr. G. H. Pring (1906), Superintendent of the Missouri Botanical Garden, attended the Annual Congress of the Men's Garden Club of America in Detroit with over 400 registrations. He was elected delegate representing the Webster Groves Men's Garden Club. At their banquet he was awarded the Annual Gold

Medal for meritorious horticultural achievement. This is the third National Gold Medal Award for plant breeding and horticulture that Mr. Pring has received. These include the National Association of Gardeners of New York and the Massachusetts Horticultural Society of Boston. He has also received a citation from the American Horticultural Council, awarded at their meeting at the University of Michigan. (Refer to *Kew Guild Journal*, Vol. VII, No. LX, page 288.)

Mr. J. W. Watson (1923), was awarded the Associateship of Honour by the R.H.S. in December, 1961.

EXAMINATION SUCCESSES

NATIONAL DIPLOMA IN HORTICULTURE, 1961.

Finals : ---

Section I—General Horticulture : —

Mr. P. T. Bridgman (Student); Miss A. D. S. Hopkins (1956).

Section VI-Horticulture in Public Parks :---

Mr. P. Addison (1957); Mr. E. Baverstock (1954); Mr. T. Deans (1960).

Intermediate : ---

- Mr. J. Aldous (Student); Mr. R. T. Harrison (Student);
 Mr. B. Humphrey (1961); Mr. B. Lowe (1961);
 Mr. A. Pierce (1960); Mr. T. Preston (Student);
 Mr. J. Simmonds (Foreman).
- Mr. B. Humphrey was awarded the Chittenden Memorial Prize, which is given annually to the candidate obtaining the greatest number of marks.

(Mr. H. R. Dally was awarded this prize in 1954.)

INSTITUTE OF PARK ADMINISTRATION—THE COLLEGE CERTIFICATE.

Awards to Students who attended Course No. 21 :--

- Mr. R. Adams (1959); Mr. B. Carter (1958); Mr. M. Collett (1958); Mr. A. Hart (1958); Mr. R. T. Kerr (1959); Mr. F. North (1948); Mr. H. C. P. Rattenbur (1951); Mr. D. Tomalinson (1959;
- The first award made of the W. W. Pettigrew Memorial Prize for the best student in his year has been made to Mr. R. T. Kerr of Course No. 21.

This account is not complete and for this we present our apologies. Members seldom inform us directly, we wish that they would. It would help so much.—

" All men have their faults; too much modesty—"

KEWITES IN THE HOME PARKS.

(The Activities of Kewites from the pages of *Park Administration*—the Official Organ of the Institute of Park Administration).

Mr. R. C. McMillan, Director of Parks, Manchester, ended a very busy term of office as President 1960-61 with the 35th Annual Conference which was held in Manchester, September 5th-7th, 1961.

Kewites will note with pleasure that Mr. E. W. B. Gale (1932) has been announced as President-Elect. Mr. W. Howell (1925) remains as an Associate Editor dealing with Landscape Design and Construction.

Among the papers given at this conference was "The Design and Layout of Public Gardens and Open Spaces" by R. Sudell (1915), as Past President of the Institute of Landscape Architects.

Mr. F. H. Eul (1935) has been re-elected to serve upon the Institute's Examination Board.

Mr. G. C. Weighill (1953) has been appointed to the post of Parks and Cemeteries Superintendent to the City of Exeter. Mr. Weighill was a student at the John Innes Horticultural Institute before coming to Kew. Before taking the Exeter appointment he was Deputy Parks and Cemeteries Superintendent to the City of Bath. The staff at Bath presented Mr. Weighill with a fine Westminster chiming clock with an inscribed plaque.

Mr. R. T. Kerr (1959) was appointed as Technical Assistant to Bournemouth Parks and Cemeteries Department and took this up in March, 1961.

As mentioned under awards, Mr. Kerr became the first recipient of the W. W. Pettigrew Memorial Prize as top student at the Institute of Park Administration College at The Grotto (Course 21).

The W. W. Pettigrew Memorial Prize has been instituted by the Council of the Institute to commemorate the very active part played by Mr. Pettigrew, V.M.H., in the affairs of the Institute.

An obituary for the late W. W. Pettigrew is in *Kew Guild* Journal 1946 and 1947, Vol. VI, No. LIII, pp. 593 and 594.

An interesting article contributed to the January, 1961, copy of the *Journal* by N. Waumsley (1948), has as its title "Parking Areas Adjacent to the Modern Highways". Mr. Waumsley has considerable experience in highway development and planting. His suggestions are sound, to quote : "It has been found undesirable to have sections of old road or areas of brushwood along the roadside hidden from view as they become fouled and are often used as rubbish dumps. However, once adequate refuse disposal and other facilities are provided, I think this problem would largely disappear".

Once again we thank Mr. K. L. Morgan, F.C.C.S., the Secretary of the Institute of Park Administration, for his kind permission to extract the above interesting information from the *Journal of Park Administration*.

Mr. A. Hart (1958) has taken up an appointment with the Harlow Development Corporation as Landscape Inspector.

Mr. B. Carter (1959) was appointed Technical Assistant to the Borough of Ealing, taking up his post in July, 1961.

Mr. P. A. C. Tebby (1953) took up his appointment as Deputy Superintendent to the Borough of Chelmsford on 1st May, 1962.

Mr. D. A. Brown (1950) has been appointed Superintendent of Merton and Morden Parks Department and takes up his duties on 1st February, 1962. His previous post was Superintendent of the Parks and Cemeteries Department, Pudsey, Yorkshire.

Mr. W. N. G. Gilmour (1952) has been appointed Assistant Parks Superintendent of the City of Sheffield. Taking up this post in May, 1961, he has succeeded Mr. F. Constable who has moved to Derby. Mr. Gilmour's previous post was as Assistant Superintendent at Torquay, where he moved from Scunthorpe in 1956. His wife Sheila (née Nelmes) is the daughter of the late Ernest Nelmes (a former Editor of the *Kew Guild Journal* and world authority on *Carex—Kew Guild Journal*, 1958, Vol. VII, No. LXIV, p. 709.

Mr. A. Barrett (1948) has left Messrs. Notcutts, Woodbridge, having been appointed in September as Technical Assistant to the West Suffolk Education Committee.

Mr. F. Constable (1949), F.Inst, P.A., Deputy Manager of Parks, Cemeteries and Allotments to the City of Sheffield, was appointed to the post of Superintendent of Parks, Cemeteries and Allotments to the County Borough of Derby.

Mr. Brian G. Thames (1961) who attended the Kew Students Course, 1958-60, took up the post of Assistant Garden Superintendent to the Borough of Kingston in November, 1961. He is working under Mr. L. R. Brown (1950), who is in charge of this department.

Mr. D. S. Gilkison (1960), who attended the 1961 Course at the College of Park Administration, has been appointed as Technical Assistant to the Hornchurch Parks Department, Essex.

Mr. A. Pierce (1960) writes from Liverpool, in October, 1961 : "I have now officially taken the foreman's post in Stanley Park and I am settling in. Actually it has been quite a hectic week as I became engaged last weekend to Miss Georgina Edwards (Tit-bit for the *Kew Guild Journal*). Another piece of news that you might not have heard is that Roy and Flo. Jones have a baby son, Nigel Timothy. They are all well and I go up to see them occasionally at Calderstones Mansion House."

N.B.—Mr. A. Pierce passed the N.D.H. Inter. Exam. in 1961. —"Friends to congratulate their friends made haste."

Mr. Hart (1958) has been appointed to the post of Landscape Draughtsman with the Directorate of Works (War Office), Chessington, Surrey. Mr. Hart's previous post was that of Assistant Landscape Inspector at Harlow New Town. Mr. P. Hayward (1950) is also holding a similar position at Chessington.

Mr. B. Hill (1961) took up the appointment of Technical Assistant of Newcastle Corporation under the Director, Mr. J. A. Mann (1930). Mr. T. Seager is the Deputy Director (1955).

Mr. A. Pedley (1959) commenced his duties as Parks Foreman with Aldridge Urban District Council on 8th May, 1961.

NEWS FROM THE WORLD OF EDUCATION.

Dr. G. De Wolf resigned from the Colonial Office on 28th April, 1961. He was engaged upon the Flora of Tropical East Africa at the Herbarium where he worked for $2\frac{1}{4}$ years. The Doctor has returned to the United States where he holds the post of Lecturer in Botany at the Georgia Southern College, Statesboro.

Mr. K. M. Lycett, who stayed on at Kew after his studentship started on a teacher's course at the City of Worcester Training College in September, 1961.

Mr. H. J. Eaton (1946) took over his duties as Director of Rosewarne Experimental Horticulture, Cornwall, on 1st January, 1962. A large number of experimental hedges have been established at this Ministry of Agriculture establishment with a view to studying the problems connected with shelter and the protection of commercial crops.

We congratulate Mr. and Mrs. Leo Pemberton (1954) on the birth on 15th June, 1961, of a daughter, Veronica Ruth. Mr. Pemberton is busily engaged upon the Nursery Practice Course at the Horticultural Section at Swanley of the Kent Farm and Horticultural Institute.

Mr. B. R. Savage (1951) has been appointed Assistant Lecturer and Advisory Officer at Brookley Hall Farm Institute under the Leicestershire County Council. Mr. E. V. Wray (1948) is again in the news^{*}—he is having great success with his Rural Science Club at his school, the Huntcliff Secondary at Kirton, Lindsay, Lincs. For the second year running his pupils, to use the press term, "stole the thunder at the Kirton Lindsay Horticultural Show". They won a diploma with a non-competitive group which consisted of three tables showing : (1) the propagation of *Begonia Rex* and Black and Red Currants ; (2) an exhibit of herbs and eggs from his departments with linking dishes and preserves demonstrating the connection with domestic science ; and (3) the cultivation of Aubergines by pot and ring culture methods with an additional display of unusual vegetables.

* Kew Guild Journal, 1960, Vol. VII, No. LXV, page 801.

KEWITES ABROAD.

"Cascades and Lakes as fine as Risdale drew." (The Rise and Progress of the Present Taste in Planting 1767).

Mr. Henry Hutchinson (1911-13), brother to Dr. John Hutchinson of Kew, has become one of the foremost builders of man-made waterfalls in the United States. Mr. Hutchinson's *magnum opus* was completed in 1956. In this layout a whole mountain stream was created with 26 waterfalls in the grounds of S. H. Davis of Willowick, River Oaks, several hundred miles from the nearest mountain. Another of Hutchinson's works was completed at the home of Pat and Joe Henley in Liberty during 1958. Here four waterfalls feed a heated outdoor swimming pool set in the midst of a landscaped garden.

Quoting from a letter we received from Mr. Hutchinson, written from his home at Houston, Texas, on 25th September, he states: "We have just come through a terrible storm on the coast of Texas, about 700 miles of coast. The winds were as high as 175 miles per hour, however Houston missed the worst of the storm. As a news item, Houston has just been awarded the new \$60,000,000 space installation built in an effort to reach the moon. It will be built at a 1,000 acre tract about 20 minutes drive from my home. I am very active in landscape architecture. As Houston is such a wonderful city of homes there is a very large field, as the ordinary person can employ an architect to have his garden designed and built. The standard of living is very high here and while it is hot in summer it is beautiful weather all winter, no snow or ice. If it does snow, which happens once in ten years, the school children get a holiday to play in it.

"I should like to call your attention to my village where I was born, Wark-on-Tyne, Northumberland. It has about 200 inhabitants and has produced SIX KEWITES—T. W. Brown (1899), W. Robson, J. Scott (1909), W. Scott (1922), my brother, Dr. John Hutchinson (1904) and myself (1913). I have dinner with George Pring once in a while."

Mr. T. R. N. Lothian, O.B.E., N.D.H. (N.Z.), who is Director of the Botanic Garden, North Terrace, Adelaide, South Australia, wrote in early December that they were suffering extremely dry conditions with the temperature having been "above the century mark on a number of occasions". Remarking upon the development of the 150-acre property in the Mt. Lofty ranges Mr. Lothian writes that—"conditions here are more conductive to the successful cultivation of temperate deciduous trees and shrubs".

Mr. T. R. N. Lothian (1940), overseas member of the Kew Guild Committee, referred to the *Journal* in a letter sent to Mr. Sealy, the Secretary, and dated 25th September, 1961. He stated —"It is always pleasing to receive this and in this way to keep in touch with one's former colleagues".

Mr. Lothian also gave the following news item, to quote— "A little while ago I had the pleasure of having Mr. Roy Rumsey in my office. He has his own business under Roy H. Rumsey Pty. Ltd., Nurseryman, Old Northern Road, Glenonie, N.S.W. It is suggested that this address be used.

"Other Kewites are R. H. Hardie, who is my Plant Propagator at the Botanic Garden. He is doing an extremely fine job of work and since his arrival both the displays in the glasshouses and our special displays at the Royal Agricultural and Horticultural Society's Annual Show, National Flower Day and the like have been outstanding."

We thank Mr. Lothian for his letters which are full of news of the activities of Kewites in Australia. In a letter dated 7th December, 1961, Mr. Lothian gave news that he had heard from Arnold and Pauline Himson (1948). Quoting from this— "Mr. Himson advises me that he is not working in a public position any longer. They purchased a small orchard property and the pair of them are fully engaged in working same. They are apparently both quite well, and one of these days I may manage to get down to Tasmania to see them. If I have any further information I will let you have it."

Mr. O. F. V. Wuyts (1915) visited the Gardens during the summer, 1961. It is not surprising that this Old Kewite spent considerable time in the Arboretum Nursery, for he is a specialist upon plant propagation and has an intimate knowledge of continental methods. From 1920 to 1948 he was teaching floriculture at the Agricultural College, University of Ghent.

Mr. Wuyts also introduced us to the fine publication upon tree and shrub propagation—*Boomteelt* by P. de Vogel, published in Holland by P. Noordhoff, Groningen. Price f2.70.

Mr. C. E. T. Shepherd (1955) of N. Rhodesia sent in an interesting letter dated 18th July, 1961. Here is an extract— "Thank you for the current edition of the *Journal*. We were interested to read Mr. Everitt's (Superintendent of Queenstown.

S.A.) account of Ex-Kewites in South Africa. Here on the Copperbelt of N. Rhodesia we have several Old Kewites working. Mr. J. Thomas (1946) is Superintendent in charge of Mufutira Mine Parks Department, and in Kitwe Mr. Durrant is Horticulturist. I have been promoted to Deputy Parks Superintendent. We are also reinforced in our battle against the elements, pests and untrained labour by several English-trained colleagues. Mr. A. Bettesworth (1949) has left Johannesburg, S. Africa and has taken up an appointment with Salisbury City Council, S. Rhodesia.

"It is also interesting to see Mr. Everitt's note that Mrs. Sheat was the only lady Old Kewite in S. Africa, but for your information and interest, Mrs. Pringle (Doris Newton) 1956, is married to an Old Kewite, Mr. D. J. Pringle (1956) and is now in Kenya. Also my wife Norma (née Williams) worked in the Herbarium from September, 1948 to October, 1950, so you see the Old Kewites wives are scattered from North to South."

Thank you Mr. Shepherd, and congratulations upon your promotion.

Mr. W. A. G. Gunn (1961) left Kew to become Assistant Superintendent to the Johannesburg Parks Department, S.A.

Mr. W. Sykes, who was often working in the Herbarium and was a frequent visitor to the Gardens, has been appointed a Scientific Officer in the Botany Division of the D.S.I.R., Christchurch, New Zealand. He will work mainly on the taxonomy of plants cultivated in New Zealand and assist in studies of the numerous established introductions.

Mr. Paul J. Darbyshire (1960) who is a Technical Assistant with the C.S.I.R.O., Canberra, Australia, is taking part in a plantcollecting expedition to New Guinea for one year with Dr. Hoogland. He left Canberra on the 22nd May, 1961 and journeyed by plane to Mt. Hagen in the Highlands, from there to Wewak and on to Aitape, thence up into the Torricolli Mountains (to Lumi), down the Sepik Valley and back to Wewak by native canoe and by air.

Sending his kind regards to all his former colleagues in November, 1961, he stated that he was about to climb an unnamed mountain higher than Mt. Somoro (4,800 ft.) which he had already ascended.

Mr. I. Wilkinson (1955) has been on leave recently, and he visited Kew a number of times. In a letter received from him in July, 1961, and written from his new address at the Soon Lee Estate he states that he had spent a year in the Hills of North Malaya close to the Siam border. He says that the hill estates are very pleasant and much cleaner on foot than those on the flat lowlands. On arrival at the Soon Lee Estate he found that the replanting progress had been badly delayed, and that all were on a 12-hour day.

Sadly we present this article, for Major F. R. Long (1908), one of our great pillars of strength in South Africa, passed away in December, 1961. Shortly before his death he sent in a copy of the article which he wrote for the *Eastern Province Herald* in August, 1961—"Know Your Plants". Among the rare plants of the Eastern Province which he described is *Strelitzea juncea*, the Crane Flower, with its sharp pointed leaves it is found only in the Bethelsdorf. Another plant which he mentioned is *Sterculia alexandri* which is found just outside Vitenhage. Perhaps it is not generally known that two succulents were discovered by Major Long—Heurnia longii and Stapelia longii.

The Eastern Cape Naturalist, No. 13, September 1961, contains an account of the History and Development of Settlers Park Nature Reserve by J. E. Shelton, Deputy Superintendent of Parks, Port Elizabeth. Accounts of the development of this park will be found in previous *Journals*, while the group photograph "Yesterday, To-day and Tomorrow" was taken at the Fred Holland Memorial with the Park.*

The late Major F. R. Long, known as the "father" of Settlers Park, predicted that it will become a second Kirstenbosch. The City of Port Elizabeth, which had taken over the site in 1907 resolved that a Nature Reserve be established in this area in 1932. It was declared a Wild Flower Reserve in 1938. In 1952 the City Council adopted a suggestion that Baakens River area should be named Settlers Park in honour of the 1820 Settlers who landed in Algoa Bay. Wisely an Advisory Board, consisting of several interested groups, has been set up.

It may be of interest at this stage to point out that no fewer than four well marked floral regions converge on the City and its environs. The Western Province flora typified by *Protea grandiceps*, *P. mellifera*, *P. neriifolia*, *Leucospermums*, *Leucadendrons*, etc stop on the Western Boundaries of the City. Secondly, the Karoo, with the ubiquitous *Euphorbia*, *Strelitzia parvifolia*, *Nymannia capensis*, etc., invite us to explore its vast tracts. Winding its way gracefully from the North East is the Coastal Belt and last but not least to be mentioned is the Addo Bush comprised chiefly of the Spekboom (*Portulacaria afra*) a grand sight when in full bloom.

Over a period of the last three years, a comprehensive collection of *Proteas*, *Ericas* and *Leucospermums* have been planted out in informal groups and it is interesting to note that these plants thrive under the prevailing conditions, so much so in fact, that two years after being planted in the Reserve, several plants of *Leucospermum reflexum* carried in the vicinity of 200 blooms each on plants standing 4 feet 6 inches high with a spread of a similar distance. A lovely dell with very steep slopes with various

*Kew Guild Journal: 1958, Vol. VII, No. LXIII, p. 562. 1959, Vol. VII, No. LXIV, p. 685. 1960, Vol. VII, No. LXV, pp. 797 and 808.

aspects, e.g. east, west and south facing, has been adapted for a collection of *Encephalartos*. To date 14 species are thriving, which is most pleasing in view of the fact that some of the plants were moved at an age of well over 100 years.

It will naturally take a number of years to complete development but much of interest and beauty may be appreciated by visitors.

NEWS OF KEW.

Lovers of Kew will be especially interested in the recent book by S. A. Pearce—*Ornamental Trees for Garden and Roadside Planting*, published by Collingridge at 35s. Apart from the sound written material there are many excellent photographs, and Kew is figured prominently among other famous gardens and plantings.

There is a fine photograph of Mr. Pearce on the attractive loose cover supplied with the book. The author is holding one of the lower branches of the pair of *Quercus conferta* in Pagoda vista.

Miss M. I. Skan, who was awarded the M.B.E. in the New Year Honours (1962), has been on the Herbarium Staff since 1919. She has been responsible for the compilation and proof reading of supplements VII–XII of the Index Kewensis.

Mr. D. A. Reid returned from America on 23rd August, after $2\frac{1}{2}$ months' stay in the State of Michigan. For the first three weeks he was engaged on studies of the *Telephoraceae* in the University of Michigan Herbarium at Ann Arbor. Thereafter he was based on the University Field Station at Pellston and spent his time collecting and painting fungi of all groups, and attempting to decide whether the fungi passing under the same name in Europe and North America were in fact the same species. He has sent back a large amount of dried material and in addition has made 125 paintings of North American fungi for Kew.

Dr. C. E. Hubbard, Dr. C. R. Metcalfe and Mr. M. J. S. Sands attended the Norwich Meeting of the British Association from 30th August to 6th September, the first two giving papers on "Some aspects of the classification of tropical grasses" and "Recent and current work on the systematic anatomy of Mono-cotyledons", respectively, and the last, in the late Dr. Turrill's absence, reading the latter's paper on "Trees considered aesthetically".

Dr. R. Melville was awarded a Senior Research Fellowship of the Department of Scientific and Industrial Research, New Zealand. He left in October to spend six months attached to the Herbarium of the Botany Division at Lincoln, near Christchurch. He intends to travel widely in the North and South Islands studying the flora and collecting extensively, paying special attention to the critical genera needing revision.

Dr. Melville spent a day with Mr. L. Johnson of the Botanic Gardens Herbarium, Sydney, going on a round trip of about 120 miles to the Hawkesburg River, where they saw many interesting *Proteaceae*, etc., in flower.

During early November he flew to Auckland and for $2\frac{1}{2}$ weeks he made an extensive collection in many botanically rich areas, including several from which an earlier Kewite, Allan Cunningham, had collected types of new species in 1826 and 1838.

Mr. C. Jeffrey left during October, 1961, for a six-month botanical collecting and survey trip to the Seychelle Islands under a Colonial Office scheme. Exhaustive collections, with particular attention being paid to endemic and adventive species are his main aims, but an attempt to define areas suitable for scheduling as reserves for the conservation of some of what remains of the unique endemic plant communities will also be made. He spent a week at the East African Herbarium, Nairobi, working on East African *Compositae* and *Cucurbitaceae* before proceeding to Mahe, Seychelles, where he arrived on 27th October. He has found collecting and drying very difficult as it is proving to be a record year for rain.

Dr. G. Taylor, the Director, visited Leyden during May to take part in a discussion with Dr. F. R. Fosberg, Dr. H. J. Lam and Dr. A. C. Smith, the other Members of a UNESCO committee, on the organization and future development of tropical herbaria.

KEW'S FAUNA.

The Kew Bulletin, Vol. 15, No. 2, 1961, contains an account of the "Additions to the Wild Fauna and Flora of the Royal Botanic Gardens, Kew : XXIV" by Mr. H. K. Airy Shaw. The records it contains covers the period 1952-1960. The account includes a contribution by Mr. K. A. Spencer of Hampstead on the leaf-mining Dipterous family *Agromyzidae*, on which he is a world authority. The bird records were prepared by Messrs. J. H. Hemsley, E. Milne-Redhead and J. E. S. Souster and Dr. J. W. Landells. Mr. J. L. Gilbert also assisted and in the words of the report—" has been indefatigable in collecting material of some of the less conspicuous organisms—notably *Collembola* and *Lichenes*."

Naturally, the report contains a vast amount of interesting information, for example—in March, a Shag *Phalacrocorax aristoleia* (L.) arrived in the Gardens. Miss Susan Carter (Mrs. Holmes), a Scientific Officer in the Herbarium gave the following eye-witness account of its arrival in the Kew Green area : —

"'On Wednesday evening, 23rd March, at 5.40 p.m., I arrived at the bus stop on Kew Bridge to wait for a bus to Hammersmith. I was the only person there, and had been waiting for three or four minutes, when I suddenly became aware of a fairly large, black bird flying along the centre of the road, from the Chiswick side of the bridge, and about 15 feet above it. I thought it was a cormorant, so frightened by the traffic that it couldn't find its way over the parapet of the bridge to the river below. It was flying quite normally, and did not appear to be at all injured. Much to my alarm, it flew lower, and landed, with a slight skid, in the middle of the road, exactly by the stop on Kew Green for buses going into Richmond. The traffic all came to a halt while the bird stood there with its long neck outstretched and its head cocked to one side. Then it started to walk between the cars, but I saw a man on a motor-cycle get off (there was no one at the bus stop) and stoop down, evidently to pick the bird up. At that moment my bus arrived, so I couldn't stay to see the sequel.'

"This Shag was taken by the motor-cyclist to Mr. J. H. Claiden, the Bird Keeper. It was found to be undamaged, and was let loose on the Pond. It soon became quite at home, flew freely, swam and dived for fish, sometimes among the Tufted Duck (*Aythya fuligula*) which were being fed by visitors. At times it stood on the bank within 6 yards of onlookers. It was last seen on 30th March.—E. M. R."

Other interesting records include—the successful nesting and breeding of a family of blackbirds on a mop head at the Herbarium, and the fact that large numbers of Brambling, Chaffinches and Greenfinches were seen on heaps of spent hops in the Arboretum Yard where the hop seeds provide a rich additional source of food.

Putting this interesting report to one side, after due thanks to Mr. H. K. Airy Shaw, one is mindful of the poem "Leisure" by William Henry Davies—"What is this life if, full of care, We have no time to stand and stare?"

Yet on Wednesday, 12th July, 1961, however busy we were we just had to "stand and stare" if only for a very brief moment, for stranded on the shore of the Thames at low tide, just above the Isleworth Gate of the Gardens was a 17 ft. whale. It was identified as a female Lesser Rorqual or Pike Whale. Despite attempts by the river police to revive it by towing it into deeper water, it died. Later a scientist at the Natural History Museum, South Kensington, stated—" that it had threshed about and cut itself on the shingle, but it did not die of its wounds. The river is very oily at this point and it probably could not breathe properly."

Towards the end of October, 1961, the ornamental fowl living by the lake and Palm House pond were being harassed and killed by the daring raids of a fox; these included some of the valuable fowls which had recently been purchased. With a certain regret shooting was decided upon and a fully grown "dog" fox was shot at 6.30 a.m. on 27th October in Syon Vista.

An interesting attempt to catch a fox in the Gardens is recorded in *Kew Guild Journal* 1901, No. IX, p. 12—too noisy for success !

Another unusual find was a snake in the Order Beds on 6th June, 1961. It was determined by the British Museum (Natural History) as *Natrix mavra*—the Viperine, a native of Southern Europe and N.W. Africa, not infrequently offered in England in pet shops.

On Monday, 21st August, 1961, at Richmond Magistrates' Court, two young men, aged 18 and 20, were charged with taking a fish from the Palm House Pond. At 5 a.m. on Sunday a constable found them in the Gardens with a quantity of fishing equipment. The police stopped the men in Kew Road when the fish, a two and a half pound carp was found on them. One was fined 10/-, and the other, who admitted previous conviction for larceny, was fined £2.

PALM HOUSE AUTOMATIC WATERING

Old Kewites, who have spent many hours in their student days dragging hoses around the Palm House, will be glad to learn that this drudgery will be much reduced for their successors in the future, as an automatic water system has been installed.

The new system will not do away with hand watering of individual plants, each of which will still have to be attended according to its needs, but it will make the task of maintaining the necessary background humidity a great deal easier. It will provide a fine spray of water over the whole area of the house (simulating rainfall) whenever it is wanted.

During the times when the gardening staff are not on duty the system will be controlled by a time switch set to operate the jets at predetermined intervals. Humidity level during these times will therefore be subject to much closer control than has hitherto been possible. When the staff are there but the house is closed to the public, the system will be operated manually. One man will be able to do in a few minutes without effort what now takes two men an hour of heavy manual labour. Only during the time the house is open to the public will the system be out of use and strict precautions will have to be taken to see that the automatic control is cut off at those times—it would not do for automatic spray to cut in when the house is full of lady visitors in summer frocks !

The new system has been designed by Ministry of Works engineers in conjunction with Long Ashton Research Station.

R. W. KING.

DASYLIRION LONGISSIMUM LEM.

Many Kewites will remember this plant in No. 5 House, with its dense rosette of dark green long-linear leaves, in fact some may recollect actually tending it. In July, 1961, it sent up a flowering spike so tall that it was necessary to remove a pane of glass to let it through the roof! The total height of the plant (including the stem) was approximately 20 ft. The inflorescence resembled a yellow *Eremurus*, and attracted numerous bees.

As far as is known by the writer, this is the first time a *Dasylirion* has flowered at Kew. At a rough estimate, the plant may be 80-100 years old, or possibly more. E. W. MACDONALD.

OIL AT KEW.

Lorries trundling through the Gardens heavily laden with bags of coke have been a customary feature of the Kew landscape for many years, and the sight of one may have caused many a visitor to speculate on the amount of coke needed to maintain the proper temperatures in the great Palm House and other heated glasshouses.

Visitors need trouble their minds no longer on this score. Kew's fuel requirements will in future be measured in gallons rather than cwts., a programme is in full swing to convert all the coke-burning boilers into oil-fired installations. A good part of the programme, on which the Ministry of Works is spending £45,000 has already been completed at the time of writing (December, 1961) and by the time this note appears all the work will no doubt have been done.

One incidental result of the conversion of the Palm House boilers is that the Campanile near the Victoria Gate which was the chimney of Decimus Burton's original installation but has not been used as such for many years, will come back into use again. This building may also have been a source of curiosity to visitors who may often have wondered what function it served in the running of the Gardens, as it is some way from the Palm House. Few of them would guess that it is connected to the Palm House by a Its original function was taken over fairly early on by tunnel. two squat chimneys projecting from the north and south wings of the Palm House. Conversion to oil-firing will enable these protuberances to be removed and the lines of the Palm House restored to Decimus Burton's original design. The tunnel, through which coke was formerly taken by hand, but latterly by electric truck. will serve as a duct for pipelines.

One factor which makes the work of conversion in many cases a desperate race against time is the necessity to ensure that the glasshouses are not left without heating when the cold winter weather arrives. Conversion is essentially a summer job and the Ministry of Works heating engineers have acquired many a new grey hair in trying to get the work done in time.

When the work is completed throughout the Gardens, a central warning panel will be installed so that the duty man will be able to tell at a glance whether any installation is not functioning correctly and will be able to take whatever remedial action is necessary. Instead of the coke-lorries and the inevitable piles of coke in store, tankers will quietly deliver their supplies of oil by pipeline into discreetly hidden tanks and the heavy labour of manhandling the coke will be gone for ever.

What happens if we have another Suez crises or something worse? We are assured that there will be sufficient supplies to keep us going for a time—if we have any time—while we can make what arrangements we can. Nothing better can be said for coke.

R. W. KING.

VISITORS TO KEW

Botanists from the following 18 countries have been working at the Herbarium during the week ending 12th August, 1961 :---

Dr. H. Czeczott (Poland)

Mr. G. R. Proctor (Jamaica)

Dr. R. E. Vaughan (Mauritius)

Miss C. Hambananda (Thailand)

Mr. J. W. Parham (Fiji Islands)

Mr. M. Khan (Pakistan)

Mr. H. A. Alizzi (Iraq)

Mr. J. P. D. W. Payens (Holland)

Dr. H. Eichler (South Australia)

Mr. D. S. Ashton (Brunei)

Mr. T. Hagos (Ethiopia)

Dr. J. Miege and M. J. Bodard (Dakar)

Mr. Rose-Innes (Ghana)

Dr. F. G. Brieger (Brazil)

Mrs. A. B. Cone (New Zealand)

Mr. Allen (Malava)

(1, 2, 3)

1.00

Dr. R. R. Stewart (United States)

Mr. Marais (South Africa)

14 overseas countries represented on 11th August.

The R.H.S. Lily Group visited Kew on Saturday, 8th July, 1961, mainly to see the Lily collection which has been established in the beds near Cumberland Mound. *Cardiocrinum giganteum*, perhaps better known as *Lilium giganteum*, the giant white trumpet lily flowered in the species Rhododendron Beds in the Arboretum. A large number of bulbs had been planted in the early winter of 1960-61 and it was from a number of these that flowering spikes were produced.

H.M. The King of Sweden visited the Gardens on 17th November, 1961, and spent an enjoyable morning with the Director making a tour of the Gardens.

Fifteen officers from various Commonwealth countries, from the West Indies to the New Hebrides, attending the Cambridge Overseas Services Course, toured all the Departments of the Gardens on 31st May, 1961.

A visit by Russian Scientists.—a party of five biologists from the Georgia Academy of Science spent the morning of the 9th January, 1961, on a tour of various departments of the Gardens including the Herbarium. They were delighted with their visit.

A series of six half-hour visits to the Gardens was televised on Channel 9 (I.T.V.) during the spring and summer months of 1961. Case 94 on the ground floor of the General Museum (No. 1) has been adapted for the purpose of showing examples of fine botanical illustrations from the Herbarium and Library Collection. The contents of the case will be changed every few weeks. As an example, one exhibition illustrated the history of Curtis's *Botanical Magazine*, and was based on an exhibit recently prepared by Mr. Sealy and his Staff and shown in Bolivia.

King William's Temple was opened to the public on 1st May, 1961. There are three seats in the building which serves as an ideal shelter for visitors during showers.

Mr. F. Ballard retired on 30th April, 1961, after a period of 34 years on the Herbarium Staff. Mr. Ballard joined the staff in 1927, working with Dr. O. Stapf on the *Botanical Magazine* staff for a period of eighteen months. Afterwards he worked for six months under Dr. Hutchinson before being appointed Botanist in September, 1929, in charge of the Vascular Cryptogams. In addition to being Chairman of the British Botany Club (now the Kew Botany Club), Mr.Ballard lectured for many years to the Kew students.

We wish Mr. Ballard a very happy retirement, to share with Mrs. Ballard, to whom we send our kind regards. Long may he continue with his work and his photography.

Mr. H. S. A. Marshall, M.B.E., Librarian, retired on 23rd July after many years of service at Kew. Many have cause to remember the help which was so willingly given. Fortunately he is still working with us in the Herbarium, where he is engaged by the Bentham-Moxon Trustees to work on the compilation of a second Supplement to the *Index Londinensis*.

Mr. P. Heawood, who was formerly Accommodation Branch Officer, and who was working in the Herbarium until his retirement in 1960, has been engaged by the Bentham-Moxon Trustees to complete the labelling and indexing of the collection of record cards which the late Mr. E. M. Marsdon-Jones gave to Kew. He will also assist Mr. Marshall in the compilation of the Supplement to *Index Londinensis*. We welcome Mr. P. Heawood as a new member of the Kew Guild.

Mr. S. W. Rawlings, Assistant Curator of the Decorative Department since September, 1948, was transferred on 24th July, 1961, to be Assistant Curator of the Tropical Department.

We welcome Mr. G. J. E. Yates as a new Guild Member. He was appointed Assistant Curator of the Decorative Department from the 24th July, 1961. An "Old Wisley Student", Mr. Yates was previously employed as Botanic Foreman at the Liverpool University Botanic Gardens, Ness, Neston, Wirral, Cheshire. We wish both he and Mrs. Yates many happy years at Kew—they reside at The Gables on Kew Green. Mr. J. B. Simmons was promoted to Foreman in the Tropical Propagating Department in August 1961; Mr. A. D. Schilling to Foreman in the Aboretum Nursery in June, 1961; and Mr. H. J. Jackman to Foreman in the Decorative Department in January, 1961. Mr. W. A. Mullins has retired from the latter post and has resumed his duties in the Herbarium Experimental Garden.

"Open Day" or "Students' Day" was held on 6th May, 1961, the exhibits being put up in the Herbarium and Orangery. The exhibits illustrated various aspects of the work of the Establishment, the Herbarium and the Gardens—collecting, mounting, botanical illustration, plant-photography, classification and specific characters and details related to individual genera and to noteworthy groups of plants were demonstrated. In all 50 exhibits were on display and approximately 850 visitors had planned to attend. The greater number of these were students, but they were often accompanied by members of the staffs. University Botany Departments, Technical Colleges, Grammar Schools, Natural History Societies and the staffs of world famous Botanical, Horticultural and Scientific Institutes were represented.

The Sixth Report of the Estimates Committee, Session 1960-61, published on 17th July, 1961, concentrates on the organisation and work of the Ministry of Agriculture, Fisheries and Food. The N.A.A.S. and the A.L.S. receive particular mention. The Committee were impressed by evidence of the high regard held for N.A.A.S. offices by the farming community, but think that a higher minimum level of practical experience should be a condition of future recruitment to the N.A.A.S. Members will welcome this official emphasis upon the need for a high level of practical experience, for the Kew trained man has proved to be first and foremost a practical man.

It is with reluctance that we strike out the name of a living member from our list, yet a letter which we received in response to the "circular" we sent out in November, 1961, from a Kewite who shall remain anonymous left us in no doubt that we should do this. To quote—"I was surprised to receive a letter from you this morning in which I was addressed 'Dear Member', I wish to say that I have never been a member of the Kew Guild, and I had occasion to point this out previously in some connection. As a member of the Body of Christ I cannot be a member of any association. I would like to say I was thankful for the training at Kew and the knowledge and experience gained has been a help in many ways in my business."

We admire the frankness and sincerity of this Old Kewite he leaves without bitterness. In return for the kind words which he wrote of Kew we send our good wishes and the hope that one day we may welcome him back.

Mr. R. A. J. Holder (1945) has retired from the post of Superintendent of the Wisley Rock Garden through ill health. Mr. Holder was awarded the Associateship of Honour by the R.H.S. in 1958. Presenting the award at the A.G.M. in February, 1959, the President, the late The Hon. Sir David Bowes-Lyon, remarked that—"Mr. Holder came to Wisley at an age when most people think of retiring, and to witness what he has done for us there is our Rock Garden, for which he is responsible, and a wonderful thing it is." Mr. Holder is the only person to date who has held the position of "Officer-in-Charge" of two of the most noted rock gardens in this country, Kew and Wisley.

A photograph with the caption—" The Morning Conference" appeared in the 1943 *Journal*, Vol. VI, No. L. In the group is Mr. Holder, who was then Acting Assistant Curator of the Herbaceous Department during the period when Mr. G. H. Preston was temporarily attached to the Ministry of Agriculture and Fisheries.

Many Kewites of 1913-15 Vintage will remember Arthur Garnett who unfortunately died whilst bathing near Bridport in August, 1927.* To quote from the obituary which appeared in *The Times* of August 22nd, 1927—" he wrote hundreds of columns, usually unsigned, for the *Field* and the horticultural press." Arthur Garnett was a very prolific writer but few realised that he was a member of a great literary family—the Garnett Family.

The recent published book, *The Garnett Family* by Carolyn G. Heilbrun[†] gives a full account of the history of the family which many Kewites, especially those who knew Arthur, would find interesting reading. To quote from this work—"Although they have served the world of English letters for nearly one hundred and fifty years, the Garnetts are among the least chronicled of England's literary aristocracy, perhaps because they have contributed more by service to others than by their own creative work." This was true of Arthur who was quoted in his obituary as follows—" but what his friends prized most dearly were the warmth and constancy of his affections, his absolute sincerity and simplicity of soul, and the unfailing kindness, help, and support he gave in every form of trouble, to every variety of human being. Young and old, rich and poor, cultured or simple—all were alike to him."

The Guild lost much by his early passing.

(We thank Mr. A. E. Aubrey (1910) for bringing this information to our notice.)

*Kew Guild Journal 1928, Vol. IV, No. XXXV, pp. 628-9.

The Garnett Family by Carolyn G. Heilbrun. Published by George Allen and Unwin Ltd., London, 1961. Price 30/-.

The Committee which manages the Pinetum on behalf of Kew and Forestry Commission, has been reorganized, with Dr. Taylor as Chairman. He succeeds Sir Geoffrey Evans, who has been Chairman for the past 15 years. The Pinetum is now visited by increasing numbers of scientists, scientific and school parties, and by the general public, who last year arrived in some 10,000 cars between March and September.

"Thus it is my ambition to become a student gardener at the Royal Botanic Gardens, Kew, for this must surely be the first rung of the ladder to a superintendentship." So wrote Mr. Colin W. Roome, aged 20 years, in his winning essay "Why I Have Chosen Horticulture as a Career." The competition was held by the Royal Caledonian Society to mark their sesquicentenary.

In a recent letter Mrs. Whibley (Miss C. Hillier, 1929) states— "My memories of the Gardens are most happy, as my childhood was spent at Hanover House when my late father was Keeper of the Museums, and later when I joined the staff."

Mrs. Whibley joined the Staff of the Herbarium as a Technical Assistant. Her father, the late John Masters Hillier, was President of the Kew Guild in 1923; a full account of his career with a portrait is in the *Kew Guild Journal* 1924, Vol. IV, No. XXXI.

Mr. Edward Yuill (1915), a biochemical and mycological research scientist, retired in 1952. Mr. Yuill's interest in mycology resulted from the course of lectures given by George Massee,* "the world authority on fungi".

After leaving Kew in 1915 Yuill served with the R.A.M.C. in Egypt and Mesopotamia until 1919. For the last year or so he was attached to a chemical laboratory and worked mainly on water purification. The O.C. (Capt. W. E. Evans of the Herbarium, R.B.G., Edinburgh) was a keen botanist and thus they found many opportunities for plant hunting. After a period as a Student Gardener at John Innes, Merton, Edward Yuill joined his brother John in biochemical and mycological research, which, under the aegis of Rowntree & Co., Ltd., York, led to the successful development of a process for the production of citric acid by mould fermentation. His process was operated for a time by an Associate Company of Rowntree & Co. and John & E. Sturge, Ltd., Birmingham. In this concern he functioned as Mycologist and Assistant Chemist for twenty years.

Before he retired Mr. Yuill wrote three interesting booklets titled *Moulds in Industry*—they are beautifully illustrated and

*Kew Guild Journal : 1908, Vol. II, No. XVI, p. 339. 1916, Vol. III, No. XXIII, p. 275. 1918, Vol. III, No. XXV, p. 426. serve to show the high standard which the author reached in photomicrography.

We are able to include some interesting quotations from these works : —

"Whatever may have been true in the past, there can be no question that nowadays any industry using micro-organisms as agents to bring about chemical changes must have an intimate knowledge of the organisms concerned.

"Where mould-fungi are used, as in the manufacture of Citric Acid and Penicillin, the acquiring of this knowledge is work for the industrial mycologist.

"He is in essence botanist-cum-gardener, gardening with microscopic plants. His 'seeds' are the mould spores, as minute as his own blood corpuscles. His seedsman's lists are the catalogues of Type Culture Collections; his soil is the nutrient media and his weeds are the stray moulds and microbes which occasionally infect his cultures; his greenhouse is an incubator and he would be as lost without his petri-dishes as a gardener with his flower-pots.—"

"Most industrial processes which harness micro-organisms for biochemical work presuppose the maintenance of a "pure line" of the organism used. With moulds, for instance, once a desirable strain has been isolated in pure culture it must be regularly subcultured, if only for the provision of the necessary quantities of seed for the day-to-day requirements of the process.

"That might seem simple enough. One has only to guard against contamination by other organisms at the time of sub-culturing, and pure cultures will surely continue to give pure cultures indefinitely.

"In practice, however, one soon discovers there are complications. To mention only the more common : continued subculture on the same type of medium, particularly a more 'synthetic' medium, tends to produce abnormal features and, what is more serious for the manufacturer, may lead to the loss of the very properties for which the original strain was chosen. Another common experience is to find contamination occurring during incubation or storage, owing to the activities of mites—very similar under the microscope to cheese mites—which forage from tube to tube and are not in the least deterred by cotton-wool plugs.

"A more subtle and fundamental cause of change is the inherent tendency of moulds to mutate, or suddenly to throw out 'sports'.—"

Mr. Yuill, with his specialised knowledge has contributed papers to many scientific publications, e.g.—*The Journal of Botany; Transactions of the British Mycological Society;* and *Nature.*

We wish Mr. Yuill many happy years of retirement.

MUSEUM DEMONSTRATION OF THE BRITISH FLORA.

In March, 1961, a specially designed stand was constructed in the side hall of the General Museum (Museum 1) and used for a continuous display of living specimens of British wild plants. Through the kind co-operation of certain members of Kew staff and the help of friends in various parts of the country, it was possible to demonstrate a representative proportion of the British flora. Rare species were excluded and a notice was shown drawing attention to the need for conserving our heritage of wild flowers. The exhibition stand was designed for adaptability and it enabled up to seventy species to be shown effectively. Each specimen was accompanied by a label with a concise, informative text. Determinations and nomenclature were checked each week by a specialist from the Herbarium staff. Approximately 680 species of flowering plants were shown in the course of the spring and summer and a separate exhibition of British Grasses was maintained for several weeks. A large "terranium" was constructed and used for exhibiting living bryophytes and other cryptogams during the latter part of the year. In the winter months the stand was used for an exhibit on British trees in winter.

The considerable amount of work involved in maintaining this display has been fully rewarded by the response and interest expressed, both by visitors to the Museum and by Kew staff. It is hoped to make this a more or less permanent feature in the museums.

A. L. JEWELL.

"During the summer of 1959 the large circular bed at the Palm House end of Broad Walk was planted with a mixed collection of Cacti and other Succulents. The feature proved such a source of interest to visitors that the grass surround was badly worn and needed a complete renewal in the autumn."*

This type of planting was not repeated in 1960, but a rectangular bed of a variety of "desert plants" was featured outside the Sherman Hoyt House during the summer of 1961. Again it proved a great attraction.

An interesting letter was received recently, sent in by Wm. Bowen, Assistant Curator, University College of Ghana—" The Victoria was slower in getting away and I had to move it several times into greater depths of water, it is now in about six feet of water, growing in a prepared bed dug out of the floor of the pool, an operation not without its hazards as there is at least one large crocodile in the pool already. The plant now carries eight fairsized leaves and is producing new leaves regularly. I am not sure whether it will behave as a perennial with us or not."

The tank in No. 10 sounds pleasanter.

*Kew Guild Journal, 1959, Vol. VII, No. LXIV, p. 692.

A VISIT BY MUTUAL SOCIETY MEMBERS TO THE HORTICULTURAL BRAINS TRUST AT BARNES.

(An extract from a Local Paper)

Twelve months ago the Barnes Horticultural Society held its first "Brains Trust" evening, with three members of the staff of Kew Gardens forming the panel. The success of the evening was such that a repetition was called for, and this was fulfilled on Friday, 27th May, 1960, when the Assembly Room at the White Hart Hotel, at Barnes was crowded with members and friends,

Three of the more youthful members of Kew Gardens staff, Miss H. Rover, Mr. P. Barnes and Mr. G. Ganney formed the panel, and they were accompanied by Mr. A. Pierce who undertook to assist generally.

The question-master was Mr. G. Hall, the society's chairman. Written questions were taken first, and the opening question was about the pruning of clematis and honeysuckle. The second was on polyanthus seed, and the third on a difficulty in growing chives. The majority of the questions that followed were about the difficulties or failures in growing particular plants or crops.

No Slick Answers.

The panel clearly had not come to give quick, slick answers, but considered advice whenever a genuine problem existed. Where it was a matter of crop difficulty, their method was to engage first in questions-and-answers with the enquirer, about, for instance, soil, situation, drainage, aspect and what steps in cultivation had already been taken. The problem was thus laid bare in an illuminating way. It was as if a patient, experienced neighbour had come into the garden to see what was really the matter, and this was all the more interesting when the panel generally joined in the discussion. There was amazement, too, as when a member produced what had turned-up out of a packet of polyanthus seed.

The first part of the evening, devoted to written questions, passed all too quickly. After the interval, oral questions were taken; these were mostly about trees and shrubs, particularly fruit trees, and here again the panel tried to get to the heart of the matter.

Thanks were warmly expressed by the chairman to the panel for giving members such an enjoyable evening, and members went away with the feeling this would indeed be a memorable occasion.

EPIPACTUS LEPTOCHILA—A NEW RECORD for AUSTRIA.

On a botanising and climbing holiday—a terrible combination! —to Austria this last summer an *Epipactus sp.* was collected in pine wood near Matrei—in Osttirol. This was one of the genera Mr. Peter Hunt (Kew Herbarium) had specifically asked me to collect, so a pressed specimen was taken and also some individual flowers preserved in spirit.

Unfortunately the pressed specimen was overlooked but that in spirit was determined as E. *leptochila*, proving the importance of spirit preservation. Dr. D. P. Young has published a paper on its distribution and he informed me that this is the furthest east and the furthest south that it has so far been recorded—the nearest being the Swiss Jura and the Harz Mountains.

It is hoped that a further visit be made to Matrei this summer and quadrats, soil samples, etc., be made.

C. D. SAYERS, Student 1960-62.

KEWITES AS AUTHORS.

STELLA ROSS-CRAIG.

"Drawings of British Plants"—Part XVI. Compositae (2). Bell (1961). 9s. 6d.

S. PEARCE.

"Ornamental Trees for Garden and Roadside Planting" Collingridge (1961). 35s.

J. P. M. BRENAN, translator.

"Wonderful Life of Flowers" by P. Jaeger. Harrap (1961). 63s.

SIR E. SALISBURY.

"Weeds and Aliens." Collins (1961). 30s.

V. S. SUMMERHAYES, ed.

"Orchids of Europe" by Duperrex. Translated by A. J. Huxley. (English edition by V. S. Summerhayes). Blandford (1961). 25s.

W. D. CLAYTON.

"A Key to Nigerian Grasses" (Samaru Res. Bull. No. 1). Kaduna, Nigeria (1960). 4s. 6d.

Flora of Tropical East Africa.

C. JEFFREY. Aizoaceae. Crown Agents (1961). 4s.

Flora Zambesiaca. Vol. I, Part 2.—Crown Agents (1961). 25s. Contributor to this part : —

N. K. B. ROBSON. Guttiferae (including Hypericaceae).

C. R. METCALFE, ed.

"Anatomy of the Monocotyledons"—Vol 2. *Palmae*, by P. B. Tomlinson. Clarendon Press, Oxford (1961). 63s.

"... Scotchmen toil hard enough in Scotland; but when they go from home it is not to *work*, if you please. They are found in gardens, and especially in gentlemen's gardens. Tying up flowers, picking dead leaves off exotics, peeping into melon-frames, publishing the banns of marriage between the "male" and "female" blossoms, tap-tap-tapping against a wall with a hammer that weighs half an ounce. They have backs as straight and shoulders as square as heroes of Waterloo; and who can blame them? The digging, the mowing, the carrying of loads; all the break-back and sweat-extracting work they leave to be performed by those who have less *prudence* than they have. The great purpose of human art, the great end of human study, is to obtain *ease*, to throw the burden of labour from our own shoulders, and fix it on those of others."

WILLIAM COBBETT—Rural Rides.

(Cobbett was, of course, an Englishman!)

News item from the Ossett Observer, Wakefield.

"At Kew Gardens is a famous cactus called Cereus which being a night-flowering plant only blooms on one night of the year. Before dawn it closes its blooms for another year. Serious Cereus spotters are allowed to make nightly visits."

Mr. G. MILNE-REDHEAD.

KEW GUILD JOURNAL 1911-50 YEARS AGO.

"Appointments & Retirements

Lt.-Col. David Prain, C.M.G.—We were particularly pleased to note in the list of New Year's honours (1912) issued by the Colonial Office, that Lt.-Col. D. Prain, C.I.E., F.R.S., Director of the Royal Botanic Gardens, Kew, had been appointed Companion of the Most Distinguished Order of Saint Michael and Saint George. At an earlier date the Director was honoured by being elected a member of the Athenæum Club under the provisions of the Rule which empowers the annual election by the committee of a certain number of persons of 'distinguished eminence in science, literature the arts, and for public services.'

Mr. C. F. Ball, of the Royal Botanic Gardens, Glasnevin, has been appointed Editor of *Irish Gardening*, a monthly publication for the promotion of horticulture in Ireland."

Among the other changes and appointments briefly recorded : ---

"J. D. Snowden, Govt. Plantation, Kampala, Uganda."

(J. D. Snowden, Vice-President, 1960/62.—Kew Guild Journal 1960, Vol. VII, No. LXV).

"Lectures at Kew.—To the young man about to enter Kew, his mind aglow with all he has heard and read of its manifold advantages, the prospect of receiving instruction on various subjects relating to Horticulture appeals to him as one of the greatest advantages of the training.

No one will deny that the present courses are interesting enough and productive of a certain amount of good, but taken as a whole, their practical value in relation to Horticultural Science is thought by the present-day gardeners to be overrated. This feeling has assumed a definite shape, and a petition asking for an improved and extended course of lectures has been sent to the Board of Agriculture and Fisheries through the Director.

The following are the leading features of the petition : An extension of the present course on Botany, with greater prominence given to Physiology. An extended course of Plant Pathology. Land Surveying and Levelling. Soils and Manures. Plant Breeding. Practical Horticulture, and facilities for attending the meetings of the Royal Horticultural Society. The sub-joined *Recommendations* concerning the "Kew Certificate" are also included : —

I. That on the certificate granted to sub-foremen the word 'sub-foreman' be *printed*, instead of written as at present. II. That the length of time served in each department be stated on the certificate. III. That a man's capabilities and general conduct be fully stated on the certificate. IV. That in conjunction with the present custom of awarding marks for the lectures, a compulsory examination be held at the end of each course and separate certificates awarded, graded first and second class.

It is felt that the Kewites of to-day will have to bear their share in the honour of upholding the reputation of Kew in the future, and not only should existing facilities be taken full advantage of, but every legitimate means used for securing better, so that the Kew man may have an equal chance with those from more modern Horticultural Institutions."

Extract from Sir J. Hooker's letter dated October 17th, 1873.— It was written to the Treasury urging the provision of lectures for young gardeners at Kew.

"Though however, the supply of young gardeners is greater than ever, it has fallen off very much in quality. The class of self-educated Scotsmen who studied Botany at home and in the field during their apprenticeship is all but extinct. A considerable proportion of those who come to Kew are too ignorant to avail themselves of the advantages offered to them. Many do not know the English names even of the commoner trees and shrubs of our Parks and plantations, and few indeed have during their apprenticeship attended to anything beyond the rudiments of kitchen gardening, and the art of growing a few showy flowers for beds or a conservatory.

"This is no doubt mainly due to the modern rage for gaudy flower-beds, consisting of but few, and those easily cultivated plants, which year after year fill the beds at one season and the houses during the other three, to the exclusion from both of plants of interest, beauty and utility, which afford that intellectual gratification which once was and still should be, one main object of a garden."

Anonymous Words of Wisdom

Overheard in the Gardens : —

"If you want to know your way around it's best to ask a foreigner. They always know!"

"Is it a weasel?" "No, I think it's a rabbit." "Oh, it's only a blackbird."

"A gardener is a botanist who grows plants, but a botanist is a gardener who watches plants grow." Now you know!

JOHN SMITH.

AROUND THE WORLD IN SEVENTY-SIX DAYS.

During my schooldays, like most British boys, I read and reread those wonderful tales of the sea, *Robinson Crusoe, Westward Ho*, and *Treasure Island*, books which have no doubt been responsible for the *wanderlust* in youths the world over, myself included, for they have all been published in many languages. I little thought as I roamed the lovely countryside in the valley of the North Tyne and dreamed of adventures, that any such would ever come my way. And when I plodged in the river to stab eels lurking under the stones I was neither aware that these slimy snake-like creatures had travelled all the way from the Sargasso Sea far out in the Atlantic, nor that I would one day pass by their breeding grounds towards the end of my days.

During my botanical career at Kew I was fortunate enough to satisfy a portion of this *wanderlust* by plant collecting in the Canary Islands, Madeira, the Pyrenees, over a great part of Southern Africa, and on the Cameroons Mountain in West Africa. I was quite satisfied with that record until one day I saw by chance an advertisement that a ship, the "Southern Cross," was sailing around the world four times a year, twice westwards via the Panama Canal and home via the Cape of Good Hope, and twice *vice versa*. Just at that time I had a good report of sales of my new edition of *Families of Flowering Plants*, and after repeating several times that "we can't take it with us", I booked passages for my wife and self. Owing to the great demand for accommodation on this popular one-class ship, we had to wait over a year before our time came, for we wished to escape the winter months if possible.

So at long last we boarded our ship at Southampton on December 6th, 1960, and were soon westward ho across the Atlantic via the Gulf Stream and the edge of the Sargasso Sea, to our first landfall, the "Land of the Humming Bird", the island of Trinidad. I had written in advance to botanists at nearly every port of call, and we were usually met at the foot of the gangway by botanical friends, old and new. At Trinidad we were entertained by Professor Purseglove, and after a walk through the arboretum at the College of Agriculture and a short botanizing excursion to the swamp forest at Aripa we much enjoyed a nativity play performed by the children of members of the staff and others under a tropical moon. Whilst there I thought of R. O. Williams, an ex-Kewite, who wrote most of the Flora of Trinidad and later moved on to East Africa, and has now retired to Constantia, Cape Province.

Our next call was at the Dutch Island of Curaçao, where the ship was refuelled, and we had time to explore the attractive town of Willemstad. The island is famous not only for its oil refineries but for its liqueur, known to connoisseurs as *Curaçao*, which owes its specific quality and flavour to the macerated peel of oranges. We were fascinated by the opening and closing of the Queen Emma Bridge, a unique pontoon structure which connects the two halves of the town, separated by the fine land-locked harbour. The wonderful shops were a great temptation to spend a portion of our carefully allocated funds needed at other ports of call.

Our next landfall was the Panama Canal, and I had looked forward to seeing this marvellous feat of engineering more than anything else on the voyage. We steamed slowly to the entrance guided by a pilot and entered the Gatun Locks early on Monday morning December 19th. It was most interesting to feel our great ship of 20,000 tons being lifted 85 feet through three separate locks. Once in the locks no ship is allowed to use its engine and it is towed through each gate by locomotives running along on each of the banks, two forard and two aft. From these locks we were now in the Gatun Lake, which was formed by daming the Chagres and other rivers, and we steamed gently amongst a number of beautifully wooded islands, really the summits of what were once hills before the area was flooded. After 33 miles of this lovely scenery we passed through the
Pedro Miguel Locks and then entered the famous Culebra Cut, now renamed Gaillard Cut, at a reduced speed. This cut is nine miles long, and the average depth to which it was necessary to excavate below the natural surface was 120 feet, the width of the bottom being 300 feet. All the material excavated from the cut had to be first drilled and then blasted with dynamite before removal by steam shovels. It was estimated that if all the drill holes which had been put down since the United States began were placed end to end, the hole would pass entirely through the earth coming out in the Indian Ocean south of the island of Sumatra ! Many more statistics might be quoted but we must hasten on into the mighty Pacific Ocean, first seen in this region by Vaco Núnez de Balboa, the Spanish Conquistadore, who in 1513 succeeded in crossing the Isthmus of Panama from Darien to the Gulf of San Miguel, that same sea named seven years later by Ferdinand Magellan. At the Pacific entrance to the Canal we paused at Balboa in order to visit the ancient Spanish Panama City. No doubt there are many descendants of pirates and buccaneers in this picturesque old place and we were strongly advised to guard our pockets and cameras. The flora of the Panama Canal Zone was well described by the American botanist Standley in 1928. The flora was little known until large collections were made by Hugh Cuming, a Devonshire man, in 1829, then by George Barclay, attached to H.M.S. Sulphur during the years 1837-39. Other fine collections were made by Berthold Seemann, and by J. Warszewicz, a native of Poland, after whom the genus Warszewiczia (Rubiaceae) with lovely enlarged red calyx-lobes was named. Seemann wrote a Flora of the Isthmus of Panama. Few countries have been named after a tree, for "Panama" is the name of a native tree, Sterculia apetala (Sterculiaceae). I saw many interesting trees in this region but lack of space forbids their mention. One of the most remarkable plants to be found in the Panama Zone is an orchid, Selenipedium chia, the only Central American representative of this small genus and closely related to that of our European Lady's Slipper Cypripedium calceolus. Standley stated that this species had been found in recent years only on Ancon Hill and hills east of Panama City. I wondered whether it was still there but dare not ask to delay the ship to find out!

We left Balboa, at the Pacific end of the Canal, at 6 a.m. on Tuesday, December 20th and we tied up at the island of Tahiti at 7 a.m. on Friday, December 30th, steaming the 4,571 miles in 10 days, i.e. at an average speed of nearly 460 miles every 24 hours. Owing to the vicinity of the cold Humboldt current it was not unduly hot on Christmas Day, which was celebrated with the usual festivities. During the whole voyage there was plenty of entertainment, including a weekly cinema show at which about 450 people could be comfortably seated at each performance. I might note here that being a one-class ship with no special cargo there were large public rooms and a vast deck space due to the absence of hatches. Five times around the promenade deck registered a mile and I frequently accomplished this without trying to break any records, after a swim before breakfast in either the pool on deck or the larger one below.

Several famous authors are for ever associated with this vast Pacific Ocean, the best known being Herman Melville, Robert Louis Stevenson, Pierre Loti and Jack London, whilst Captain Cook, Sir Joseph Banks, Dr. Solander, Captain Bligh, Robert Brown and Charles Darwin head the more nautical and scientific list. The author of *Treasure Island*, in his later years, sought in vain for health and strength in islands in the Pacific, finally settling at Vailima on the island of Upolu, Samoa, where he died in December, 1894.

Before reaching Tahiti we passed near the Marquesas Islands, the temperature on board thereabouts being only 72°F., and we were merely 10° south of the equator. Indeed on crossing the latter the temperature fell as low as 67° F! Then we steamed steadily through the Tuamotu Archipelago, known as the Low or Dangerous Islands, described as a veritable insurance company's nightmare, many of the early voyagers having been

wrecked on these atolls. Not far away on the port side of the "Southern Cross" was Raroia Island, on which the famous *Kon-Tiki* raft ended its career against sharp coral rocks. Thor Hyerdahl, the leader of this desperate experiment, sailed with others on this raft of Balsa wood (*Ochroma lagopus*) in an endeavour to prove his belief that the Polynesians were of American and not of Asiatic origin. The raft sailed and drifted for 4,300 miles of open sea in 101 days.

The Society Islands are perhaps the most celebrated in the Pacific, for here is the island of Tahiti, and I looked forward to seeing it with keen anticipation. We approached in the very early morning, and I ran below for my camera to take a picture (an exquisite one as it proved to be) of the "Bounty", not the original ship of course, but an exact replica being used to make a new colour film of the famous mutiny under Captain Bligh. So here at last we were at the place where Captain Cook and Sir Joseph Banks landed and observed the Transit of Venus on 3rd June, 1769, nearly two hundred years ago. I felt like kneeling down with emotion as we stepped ashore on this historic spot at Papeete at nine o'clock in the morning. After seeing the native market, with its wealth of fruits and souvenirs we wandered along the water front, where I photographed a tree of the flamboyant, *Delonix regia*, ablaze with its lovely scarlet flowers. In the afternoon we joined the ship's excursion along the coast by local bus, being garlanded on landing with necklaces of "frangipani" and gardenia flowers by a bevy of Tahitian girls with their young men looking on. Our farthest point was Marae Arahurahu, an ancient pagan temple and worshipping place, with a weird structure occupied by a mummified human being. Here our several buses were halted and our fellow passengers formed a circle to listen to and watch a crowd of Tahitians entertain us with singing and dancing, whilst we were refreshed with fresh coconut-milk derived from nuts from the trees over our heads,

From this fairyland scene we passed on to the seashore at Iaorana Villa, where many of us swam in the warm water of the Pacific, after which we partook of a Tahitian feast of raw fish and sucking pig, bread fruit and other ingredients, which we tasted rather gingerly. We shall never forget the scene in the moonlight amongst the palm trees and the return in the buses to the ship accompanied by the singing girls and young men; a novel and eventful day for us, at any rate, not many days away from the environment of Kew Green and our quiet home amongst the pines near Bagshot !

Varady, the author of *Many Lagoons*, remarked that in a place like Papeete one cannot help but cross the trail of yesterday's and today's adventurers, writers, painters, and globe-trotters (like ourselves). He actually met a young man named Charles Adams, a great-great-great-greatdson of the famous John Adams, the last of the Bounty mutineers who died on Pitcairn Island in 1825. Varady also met one of Fletcher Christian's descendents named Fletcher, and there was a Christian living on the island of Raiatea, next door to Tahiti.

We left Tahiti on a beautiful morning just as the sun was rising and arrived at Suva, the capital of Fiji punctually at 8 a.m. on Thursday, January 5th, where we spent only one day. However, "half a loaf", etc., and at the bottom of the gangway was Mr. J. W. Parham, Botanist in the Agricultural Department, waiting to drive us to his headquarters where we met Mr. J. M. Watson, Director of Agriculture. We visited the cocoa experimental station at Nadruloulou, some 17 miles to the north east of Suva.

Suva is a town of strange contrasts and visitors find much to interest them. Near the wharf is the native quarter and bazaar, which we explored in the afternoon. Here the Fijians and other island races mingle with Chinese, Polynesians, and Indians who are now in the majority, many selling curios and other wares. In the Botanical Garden there is a wealth of

tropical plants, native and introduced. Very conspicuous among them was a fine specimen of the Traveller's Tree, *Ravanala madagascariensis*, far from its native home. In the Museum we saw interesting relics of the mutiny of the Bounty salvaged from Pitcairn Island, a model of a Fijian village, model of a double canoe (they were up to 120 feet long and carried up to 150 men), carved figures and gods from the Solomon Islands and other interesting exhibits. Fiji's economy is based principally on agricultural production for export, though the cultivated land is very limited, being less than one-fifth of the total area. Sugar, copra and bananas are the chief crops. The classical account of the flora of the Archipelago is that of Berthold Seemann, entitled *Flora vitiensis* (1875-83), with magnificent drawings by the great Kew botanical artist, Walter Fitch.

From Fiji we sailed nearly due south to Wellington, New Zealand. Far away to starboard lay that island of botanical endemics and rarities, New Caledonia. How I should have enjoyed a month or two collecting there. At Wellington there were three botanists* waiting to take us up country and we had a most interesting three days in North Island, reaching as far as Mt. Ruapehu, still partly covered with snow, though it was well past midsummer. We motored through the forest at its base and I could almost fancy I was in the Zitzikama forest in South Africa, several of the tree genera being the same or very similar. We left this lovely country of hills and dales with regret, and there were quite two thousand people to bid our ship "bon voyage" to her next port of call, Sydney.

Space does not allow more than a brief reference to the interesting time we had in Australia including a motor trip to the Blue Mountains with Dr. J. W. Vickery, of the Sydney Herbarium, another excursion to a beautiful ravine and waterfall with Mr. L. Johnson, and a third with Mr. H. Mair, who motored us around the shores of Botany Bay, where Captain Cook and Sir Joseph Banks landed on their memorable voyage. At Melbourne we were in the good hands of an old friend, Dr. J. H. Willis, who, after we had visited the herbarium and motored around the fine Botanic Garden with the Director, Mr. Pescott, took us with Mr. Court far into the country to see the Colin Mackenzie Sanctuary for native fauna. Among many strange native animals were the Koala bear and the Platypus shown to us by the Curator, Mr. W. R. Gasking. At Fremantle we were met by my nephew, James Hutchinson. I had not seen him for 25 years, and under his wing we visited the lovely city of Perth, where the temperature topped 100°F.

Our voyage across the southern Indian Ocean was smooth and the weather perfect, though we were not far north of the so-called "Roaring Forties". At Durban, which I visited on my South African tour in 1928, we took the ship's excursion to the Valley of the Thousand Hills. At Cape Town we were met by my eldest daughter and her husband and son, spending a day at their home at Blauwberg Strand, about eleven miles north of Cape Town, with a lovely view across Table Bay and Table Mountain with the City nestling at its foot. Then we were really homeward bound via Las Palmas, where we had called several times before arriving back at Southampton strictly to schedule on February 20th, 1961, having missed a very wet winter and proved to our satisfaction that the world, believed by the late President Kruger to be *flat*, was really *round*.

J. HUTCHINSON.

Overheard in the Herbarium : --

"How are you?"

"All right, I've sunk a genus."

"Good Lor', no, it's not one of mine."

* Miss Lucy Moore, Mr. Anthony Druce and Mr. McQueen.

COLLECTING IN LOWER BURMA.

As mentioned in the 1960 *Journal*, I was fortunate enough to be awarded the Bowles Memorial Travel Scholarship, and it was agreed that I would join a botanical expedition to North Burma, to be led by Mr. J. Keenan of the Royal Botanic Garden, Edinburgh. The selected area was later changed to lower Burma and after many delays I left by air on the 25th June, 1961 to join the expedition. My arrival at the base camp was in early August.

The base camp was situated in the village of Paungdaw Power Station, 22 miles east, south-east of Tavoy. The village is 800 feet above sea-level, sheltered from the west by hills running north to south and rising to 3,500-4,000 feet. From this range a magnificent waterfall cascades in four stages from 2,300 feet joining the Paungdaw river which winds its way through a large undulating valley until it meets the River Banchaung about four miles east of the power station. The Malayan and Indian floras meet at this point and thus the area is very interesting botanically. The entire region is clothed in dense mixed evergreen forest, the valleys having an undergrowth of large clumps of bamboo, 30-40 feet in height. The undergrowth on the hillsides is much denser in places where there is a break in the canopy, and consists of a tangle of shrubs, climbers, and herbaceous plants. These hillsides are of granite and quartz, and in places there are large areas of exposed rock face with a few small shrubs, herbaceous plants, and extensive groups of ground orchids such as Spathoglottii and Habenaria spp. growing in crevices and small pockets of soil. On the first ridge nearest camp, between 2,000-2,500 feet and quite exposed, the trees are mainly Eugenia spp. with a few Oaks, but beyond this at the same altitude the forest is predominantly of *Castanopis spp.* and much darker, consequently there is little undergrowth.

My arrival at base during early August was at the height of the monsoon which happened to be the heaviest for 12 years. During the month 65 inches of rain fell; often it rained for a whole day without a break. Under these conditions we were soaked within seconds of leaving camp, either from the rain or from crossing streams and rivers. In our collecting we kept mainly to the river banks as there was usually more to be found in those areas due, no doubt, to the increased direct light.

As far as orchids were concerned, there were no collecting problems, Every tree had some on it, and those by the river were completely covered from top to bottom. Sometimes we spent hours cutting our way through undergrowth on steep slippery hillsides without finding anything to collect, although the leeches did not have such a hard job to find us. We usually arrived back at camp between two and three in the afternoon, where we would change our wet clothes and have a meal, leaving the rest of the day for writing up the field notes, labelling and pressing, etc. At the power station we were able to dry our specimens by piling the presses in front of the generators, which blew out a steady stream of warm air. The presses were inspected daily, the dried material being removed and while doing so the drying papers were changed. Using this method the material was pressed and dried in four or five days.

During the three and half months the expedition was at Paungdaw we collected 1,500 numbers of herbarium material, and where possible twelve sets of each were collected, covering all forms of plant life. Of the living material we collected 1,200 numbers, comprised mainly of orchids with a few ferns, *Hoya spp.* and *Aeschynanthes spp.* Owing to the transport difficulty during the rains many of these rotted or died before reaching Rangoon. There were also 400 numbers of animal and reptile skins, and insects, which were in most cases brought in by the children in return for sweets.

During our stay the average temperature was $87^{\circ}F$, the average minimum temperature was $72^{\circ}F$, while the average humidity was 89%. Despite the conditions however, it was a wonderful experience and one I would very much like again. R. RULE.

EXPEDITION TO ARCTIC NORWAY.

In the June of 1961 I was fortunate to be invited to join an expedition to North Norway organised by the Exploration Society of the University College of Wales, Aberystwyth.

A scientific programme had been planned to cover the specific fields of Botany, Geology and Geography, and I was included as a member of the Botanical team, our work being concentrated on the study of the Arctic Alpine flora. The area chosen was the upper regions of the Sordalen Valley, 200 miles inside the Arctic Circle at a latitude of $69\frac{1}{2}^{\circ}N$.

Having set sail from Newcastle on June 26th we arrived at Bergen the following day. Here we were obliged to transfer to a smaller vessel which took us 800 miles up the coast of Norway, via the mystic Lofoten Isles, to Tromso, the capital of North Norway. It is difficult to feel that here one is really 200 miles inside the Arctic Circle. This is due to the fact that North Norway's coast is influenced by the Gulf Stream, and it therefore boasts a far milder climate than any other land mass on a similar latitude. Birch woodlands rise to an altitude of approximately 900ft. in coastal areas and to 1,300ft. in inland areas. In summer plant growth is both rapid and luxuriant. Taraxacum in and around Tromso attains over 2ft. in height and Urtica $4\frac{1}{2}$ ft. ! As the duration of summer in this region is less than two months, this fact alone will indicate the rate of growth in this "Land of the Midnight Sun."

After a visit to Tromso Museum for advice, we set about acquiring a vehicle to transport our prodigious amount of equipment into the mountains 70 miles away. By perseverance, late in the second day we eventually secured a brand new 39-seat coach for the price of 12/0d, per head, and at 11.30 p.m. on July 4th we set up our base camp at the mouth of the Sordalen valley. Our task was to transport everything 3 miles up the valley to form an advanced camp at an altitude of 2,000ft. Four days later after several soakings and lengthy orations in colloquial English, we lay in our tents tired, mosquito bitten, but triumphant.

Work had now to begin in earnest, as the alpine flora was fast reaching maturity. We had learned previously that no botanical exploration had been made in the upper reaches of the valley and so it was here that we concentrated our investigations. On the fourth day we were rewarded by the discovery of *Papaver radicatum ssp. laestadianum*, a rare poppy microspecies that was previously only known from three other localities, two in Norway and one in Sweden. Autecological work was carried out on these newly discovered plants and a general study of the higher alpine flora was also effected.

In all over 300 dried specimens were collected with the addition of several orchid species preserved in spirit and a comprehensive collection of living specimens was made for dispatch to Kew.

Eventually on the 5th August we were compelled through lack of food to break camp and descend from the mountains. This event was due to the fact that the hoped for abundant fish supplies in the mountain lakes were not present, and as we had planned to supplement our meat ration with them, this proved a serious setback to us. One cannot live on a diet of vitamin tablets and potatoes indefinitely, so withdrawal became inevitable. This operation proved more rigorous than the arrival. With collected plant material our rucksacks weighed about 90lbs. each, and it was an eight and a half miles descent to the nearest point of reliable communication.

From this point on the Arctic Highway we returned to Tromso, and from thence, via Bergen, to Newcastle.

The expedition had lasted seven weeks in all, and within that short time I consider I learned more about myself and my fellow men than I could learn in a lifetime of everyday life. Conditions were far more rigorous than we had imagined, the mosquitos were every bit as bad as we expected them to be, and I learned for the first time in my life what hunger really meant. Despite it all the trip proved to be, both materially and otherwise, an experience of a lifetime, and given the opportunity I would willingly return and relive it all again. A. D. SCHILLING.

In Memoriam

Whereof the man, that with me trod This planet, was a noble type Appearing ere the times were ripe. That friend of mine who lives in God.

Alfred, Lord Tennyson.

C. M. MATTHEWS.

We regret to record that Cecil Matthews died in November, 1960. Matthews began his horticultural career as an apprentice at Eastnor Castle Gardens, Ledbury, in 1908. Two years later he moved to Denton Manor Gardens, Grantham. In 1913 he entered Kew as a student, but his studies were interrupted when he joined the Army in 1914, to serve as a private in the 2/10th Middlesex Regiment. He saw active service in the Middle East and was in the Gallipoli campaign. In 1917 he was put in charge of the 53rd Divisional Vegetable Gardens, Palestine.

After the war Matthews returned to his studies at Kew and in 1920 he married Miss Marion Arnold, of the Toll House, Kew. In 1920-22 Matthews became Assistant Superintendent in the Mumaun Government Gardens, U.P. India, before taking over as Superintendent in the Government Gardens, New Delhi, His work in this part was unique and extensive, covering public parks and roadside trees and ranging from the maintenance of the famous Moghal Gardens on the one hand to the establishment of the Bungalow Gardens on the other. The experience thus gained was of great help to him in his next position with the Anglo-Iranian Oil Co., Abadan, where some of the gardens had to be made from the dry desert. The Abadan Boat Club Garden was one example of this-it was here that Matthews earned the reputation of being "the man who made grass grow in the desert". Later, from 1936-39, he became Superintendent of Gardens at "Los Cayos", Nassau, Bahamas. His exhibitions at the Nassau Flower Show won for his employer the "Grand Aggregate Silver Cup" in both 1938 and 1939.

In 1946 Matthews took over as Horticultural Officer with the Imperial War Graves Commission. His long experience abroad, often under adverse condition, led to him being well fitted for the region to which he was sent—the Western Mediterranean and Eastern District. He retired from this post in 1949.

Cecil Matthews was a master of his craft and used skill and experience coupled with determination in overcoming the many difficulties which he was constantly meeting in his task of "making grass grow in the desert". In the words of his wife, "horticulture remained to the end of his career, hobby and life interest."

We offer our sincere sympathies to his wife, Mrs. Marion C. Matthews.

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H. EAVIS.

Harry Eavis was born in London in 1876 and on medical advice in his late teens turned to gardening as a career. He worked on the Llysdinian Estate in Wales and then for a time in Nottingham before going to Kew in January, 1899, where he reached the rank of foreman in the Herbaceous Department.

He went to Hindhead in 1920 to landscape the gardens for Mr. S. Marshall Bulley (brother of the founder of the Bees firm) intending to stay about six months. In the event he remained at West Down until his retirement in 1950. He was deeply attached to the place which he had virtually created and when Mr. Bulley and his son died with tragic suddenness, and Mrs. Bulley became blind, he took over the management of the estate. The West Down Estate was noted for its ornamental woodlands and particularly for the collection of azaleas and rhododendrons. In the early days, Mr. Eavis started, with Dr. Felix Bulley, a collection of alpines but this had to be dispersed during the 1914 war, most of it going to specialists, including Mr. Clarence Elliott.

A talented and knowledgeable gardener, with a retentive memory for plant names, Mr. Eavis was widely consulted on gardening matters. He was also in great demand as a judge at local horticultural shows. For several years he was Secretary of the British Gardeners Association and before the 1914 war he was a member of the local council at Haslemere.

From 1914 he served with the Queen's Royal West Surrey Regiment and the Northamptonshire Regiment, largely in guarding the East Anglian coast. Thereafter, he took a less active part in outside affairs, though he remained a member of the British Legion and at one time was President of the local bowls club.

He had a keen sense of humour, considerable personal charm and urbanity of manner coupled with great vivacity. Perhaps his most outstanding quality was his probity; he was quite incapable of a mean action.

His wife died in 1941, after many years of ill health and in 1950 he went to live in Staffordshire with his youngest daughter; here, he readily adapted himself to life in the Midlands.

Mr. Eavis went to Kew at the same time as the late Mr. C. P. Raffill and for some time they boarded in the same house. They kept in touch until Mr. Raffill's death and by a strange coincidence Mr. Eavis came to live in the parish where Mr. Raffill was brought up.

MRS. PHYLLIS M. DRANE.

We thank Mrs. Drane, a daughter of Mr. Eavis, for this fine obituary. We extend our sincere sympathies to Mrs. Drane, who is on the English Staff at a High School in Staffordshire, having obtained an Honours' degree at London University; to a daughter who is teaching in an Infant School in London; and to a son, a Senior Inspector of Taxes in London.

G. CORBETT.

We regret to record the death of Mr. Geoffrey Corbett. He died on 27th December, 1960, aged 68. G. Corbett did his early training in private gardens, notably Mulgrave Castle, Nr. Whitby, owned by the Marquis of Normandy, where he worked for almost 5 years.

He entered Kew as a Student Gardener in June, 1914, but with the outbreak of war he joined the army, serving with the Cameron Highlanders from August 1914-1917. In 1918 he held a Commission in the Lancashire Fusiliers. Upon demobilisation in 1919 he re-entered Kew. Whilst at Kew he served in the Palm House, the Stove House and the Decorative Pits.

Leaving Kew in 1920 Corbett spent about one year on a rubber and coffee plantation in Uganda before taking up an appointment as Agricultural Officer in Mauritius and Rodrignes. Later he became Tobacco Officer, during which time he made two tours of Rhodesia and Nyasaland. Corbett was transferred from Mauritius to Cyprus in 1945.

Retiring from the Colonial service in 1955, Mr. Corbett attended the Kew Dinner of that year, and he was able to meet a few of his old friends.

He is survived by his wife, two daughters and a son who is with the Colonial Service as a Plant Pathologist in Nyasaland. We offer them our sincere sympathies, extending these also to his brother, Wilfred Corbett (1925).

W. C. IBBETT-AN APPRECIATION.

I write this appreciation of Wilfred Charles Ibbett as one who has benefited directly from the excellent tuition given by the Horticultural Correspondence College. In the words of Mr. G. C. Johnson who contributed the obituary for the *Journal* (Vol. VII, No. LXV, p. 809)—"One of Mr. Ibbett's outstanding achievements was the founding of the Horticultural Correspondence College—". It must be true to state that dozens of Kewites have cause to value the help obtained from this source. A personal interest was taken in each student and the standard of his written work and his technique of answering questions was raised to a high level, often well above the pass required for the examinations.

This attribute does not minimise the value of the Kew training, in fact Mr. Ibbett was ever ready to stress the important part which the Kew course played in the education of the student. The act of spending part of his hard-earned salary to take extra external tuition, which could be continued if necessary after leaving Kew, spurred many to higher endeavour. They place great value upon the instruction they had "paid for" but, contrary to the general trend of "these modern times", the measures in return for each penny were overflowing.

I write thus with a sense of deep respect and gratitude. A portrait of Wilfred Charles Ibbett is published within these pages. —G. E. B., Ed.

J. RICHARDSON.

We regret that John Richardson, a Past President of the Kew Guild (1947-48) died suddenly on Sunday, 22nd January, 1961, in Carlisle Infirmary.

An account of Richardson's very full career is recorded in the *Journal* for 1946 and '47, and we feel that the following quotation from the obituary which appeared in *Park Administration*, March, 1961, will provide a fitting tribute to one who we were always proud to have as a member : —

"An Old Kewite, a holder of the Associate Honour of the Royal Horticultural Society, a Past President of the Institute of Park Administration and one of its Founder Members, a past Director of Parks of Manchester, Salford and Wigan, he was a rather shy, retiring man until one got to know him, when his quiet nature would expand when discussing plants or any form of gardening. His training in private service in all branches is reflected in his garden at the "Swifts,' Castle Carrock. It is a model for the young men to see as a striking example of good layout, good planting and good craftsmanship, and one felt it a great pity that the garden he had made could not be left as a memorial to a man who did much for his fellow men. As Treasurer of the Parish Church, parish councillor, leader of the Church of England Young Men's Society, and in great demand for lectures far and wide, he used his talents to the service of the community right to the end."

A. EDWARDS.

All Kewites will be sad to learn of the death on 7th January, 1961, of Mr. A. Edwards, who was at one time an Assistant Curator at Kew.

Upon leaving school in 1921 Edwards joined the well known landscape gardening firm of T. R. Hayes of Keswick,* where he remained for two years before entering Edinburgh Botanic Gardens as a student in 1923. After this period he became Foreman at Alexandra Park, Manchester, until he was appointed Assistant Curator at Kew in 1928. While he was at Kew he wrote his book Rock Gardens and was part author of The Complete Book of Gardening.

In 1930 Mr. Edwards was appointed Parks Superintendent at Fleetwood where the attractive Memorial Parks were laid out under his skilled direction. In 1932 he moved to Salford as Director, where he remained until his retirement, because of illness, in July, 1960.

Those who knew Mr. Edwards personally will appreciate the following quotation from *Park Administration*, February, 1961 :----

"Mr. Edwards was an essentially modest man, so much so that the British Empire Medal conferred upon him was awarded for gallantry in rescue operations carried out in conditions of great danger during an evening air attack."

*Kew Guild Journal, 1959, Vol. VII, No. LXIV, pages 704 and 706.

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It was this modesty, in addition to his charm and constant desire to help anyone he could, which endeared him to the wide circle of colleagues we were happy to know him as a friend.

We Kewites extend our heartfelt sympathy to Mrs. Edwards and her son and daughter in their great loss.

W. THORPE.

William Thorpe, who entered Kew as a Student Gardener in 1894, passed away on the 4th June, 1961, at the age of 85 years, two days before his 86th birthday.

Many readers will remember the interesting article which he wrote for the *Journal* five years ago—"Memoirs of an 81-year-old Kewite".* These memoirs were full of those names which will live on as long as there is a Kew, such as Sir William Thistleton-Dyer, Director 1885-1905, described in the *Journal* as "A great Botanical Administrator",† George Nicholson, Curator 1886-1901, the first President of the Guild, and William Watson, Curator 1901-22, a founder of the Kew Guild.

These were the great personalities which Thorpe found when he entered Kew in the last years of the 19th Century. He had already served under Geo. Lamb, a great plantsman, who was his foreman at Cambridge Botanic Gardens, and by the time he left Kew in 1898 he had acquired a lasting enthusiasm for plants with a knowledge and love in growing them.

His first post was as propagator to the Durham Botanic Gardens, but after three years in this position he became Deputy Superintendent of Stampford Park, Stalybridge and Ashton-under-Lyne. This was followed by appointment to the post of Superintendent at Pype Hayes Park, Birmingham. Thorpe retired from this post in 1940.

But although he held these responsible administrative posts for many years, William Thorpe retained an interest in growing plants. This is borne out by the following notes which he sent in 1956 with a photograph of a Coffee plant grown in his department many years beforehand—" Whilst I was at Stampford Park we received a seedling Coffee from Kew, it was five inches high. I gave it my personal attention and in six years it attained a height of eleven feet when it flowered profusely. I fertilised the flowers and as a result we perfected over a thousand Coffee beans. They were nice and plump, just like a lot of cherries. This display aroused much comment from visitors."

Thus has passed one who was a great Kewite and to his end a lover of Kew. We extend our deepest sympathies to his wife, Mrs. Gertrude Thorpe, who is able to record 58 years of happy married life.

* Kew Guild Journal 1956, Vol. VII, No. LXI, p. 375. † Kew Guild Journal 1929, Vol. IV, No. XXXVI, p. 715.

N. I. BAGGESEN.

With deep regret we record that Niels Immanuel Baggesen died on 18th December, 1961, at the age of 85 years.

Mr. Baggesen was born on the 5th June, 1876, in Odense, Denmark. Before entering Kew he worked for five years in practical horticulture including eight months at Messrs. John Laing and Sons, Catford Nurseries. Baggesen was at Kew for over two years; such a long stay being unusual for a "foreigner". He left Kew in December, 1900. After leaving he opened a nursery in Whitchurch, Glamorgan, with a florist's shop in Cardiff. Later he travelled south and founded a nursery in Pembury.

Baggesen was a keen plantsman, loving trees, shrubs and other flowering plants. One photograph sent in by his daughter, Molly Baggesen, shows him standing by a fine camellia in the front of his house. It was taken during 1951, and being in full bloom he was obviously and rightly very proud of it.

We extend our sincere sympathies to his daughter and to his son, John H. Baggesen, who has a nursery in Pembury and carries on the name in the nursery world.

J. S. CHRISTIE.

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The hearts of Kewites will be saddened as they learn of the death of this grand Old Kewite. He died on 24th February, aged 81. Before his entry into Kew on 23rd November, 1903, Christie already had 8 years of practical experience including $3\frac{1}{2}$ years at the Botanic Garden, Edinburgh. Two years later he was promoted to Sub-Foreman in the Ferneries. His service at Kew was extended upon the recommendations of Lt.-Col. Sir David Prain, then Director, and he left in November, 1909.

In 1910 he took up the appointment of Superintendent of Parks to the Borough of Camberwell, a post which he was to hold for over 40 years. The following quotation from the *Redditch Indicator*, 13th August, 1910, a weekly paper, is most fitting : —

"A Successful Gardener—We are pleased to record that out of a list of 208, Mr. James Christie, eldest son of Mr. A. D. Christie, late head gardener at Ragley, has been appointed superintendent of parks, gardens and street trees for the borough of Camberwell. Mr. Christie, junior, served his apprenticeship under his father at Ragley, afterwards continuing his studies and practice at the Edinburgh Botanic Gardens. Later, he went to the gardens of Baron Rothschild, Castle de Ferrien, Paris, and then returned to Hyde Park, London. For the last four years Mr. Christie, junior, has been employed as foreman at Kew Gardens. Not only those with whom he has worked, but many friends in Alchester and neighbourhood, will wish him good luck in his new sphere of labour" During the first World War Christie served with the Irish Fusiliers, being wounded and gassed at Ypres. In his retirement he lived in the Edinburgh area and was a regular attender at all horticultural meetings, shows and outings. He was a keen supporter of the Institute of Park Administration. Although burdened by illness in recent years, he was active and interested in all horticultural matters until a short time before his death. Of James Sinton Christie it may be said that his long and faithful services to horticulture and to the nation has enriched and added greatly to the prestige of the Kew Guild.

J. E. STANLEY.

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It is our sad duty to record the death on November 6th, 1961, of John Stanley at the early age of 23 years.

John commenced his career with the Cleethorpes Parks Department, where he remained, apart from National Service in the R.A.F., until he entered Kew as a student in April, 1961. His first six months were spent in the Decorative "Pits", and thereafter, until his death, in the Alpine Department.

It was evident at an early stage that he was the active type, becoming one of the personalities amongst the students at Kew. It is a measure of his popularity that he was elected football secretary in the month of his entry and in September was made secretary of the Students' Association. In these capacities his qualities of energy and enthusiasm came to the fore, showing him to be a conscientious and able administrator. He was prominent in the sporting life at Kew, being active in the tennis club, cricket team, and though new to the game, a star member of the hockey team. At social events he was always good company and a source of many ideas which contributed to their success.

Active as he was in the life of Kew, he did not neglect his studies, and was working hard for the intermediate examinations of the N.D.H. and the Dip.Inst.P.A. That one day he would have been a leading figure in the horticultural world there can be no doubt, for on personality alone he was assured of success, which makes his death all the more tragic.

He lived life to full and was doing just that at the time of his death. After spending a happy day walking over the South Downs, he was killed when the chalk gave way at the top of Beachy Head.

His presence is greatly missed by his many friends at Kew and we extend our heartfelt sympathy to his parents, brother and fiancée in Grimsby.

C. D. SAYERS, A Fellow Student.

THE HON. SIR DAVID BOWES LYON, K.C.V.O., V.H.M. AN APPRECIATION.

I first met Sir David in the spring of 1928 when he was introduced to us in the Arboretum Nursery by Mr. Osborn as Mr. Lyon.

It was explained that he would be working for several months in the Arboretum Nursery where he wished to gain first-hand experience of the raising of a large and varied collection of trees and shrubs.

Those were wonderful days at Kew for anyone keen on woody plants. Mr. Bean was the Curator and Mr. Dallimore was in charge of the Museums. Seeds were being received from Forrest and Kingdon Ward from the Far East and there was an air of excitement about for all who worked in the Arboretum Nursery.

Sir David settled down very quickly and took a very full part in our day-by-day life. Not only did he hoe the nursery beds with the rest of us but he often accompanied me carrying a trug basket and wet sacking on numerous trips around the gardens for cuttings of rare trees and shrubs. I am sure his greatest thrill came when with his own hands he dug out a well rooted cutting of Magnolia rostrata from the warm sand frame in the Arboretum Propagating Pit. A photograph of this appears in The New Flora and Sylva, April, 1929. I have a snapshot which I treasure of the Arboretum Nurserv team in 1928. This shows Sir David with Eric Godseff. Kenneth McCreadie, Leslie (Paddy) Slinger and me. I sometimes wish a tape recording had been made of some of our discussions and arguments, especially when Eric Godseff was in one of his provocative moods. Sir David possessed a great sense of humour and his laugh was infectious. He was a great countryman, and verv observant.

After he left Kew our paths crossed on many occasions and I saw much of the work he and his wife carried out in the gardens at St. Paul's Walden, Bury. I was most impressed by the very thorough preparations he insisted upon when planting the new lime avenue, even to the extent of laying drain pipes to link individual planting sites with the nearest ditch. He would always ask for news of those with whom he came into contact at Kew, and invariably sought out Paddy Slinger at the Chelsea Flower Show. The last time I saw him was on July 28th, 1961, when with my wife and daughter and her fiancé we spent several happy hours at St. Paul's.

Sir David talked then of the Kew days and reminded me of how I used to "show off" the sharpness of my propagating knife by shaving my arm ! We talked of things we enjoyed doing most and I mentioned that I never missed looking for birds nests every spring and he said he always went bird nesting and blackberry picking every year.

I still cannot take in that we shall not see him again. His very presence did one good.

F. P. KNIGHT, V.M.H., F.L.S. (1929),

29th December, 1961.

Director of R.H.S. Gardens, Wisley.

WILLIAM NICHOLAS WRIGHT

In the passing away of Mr. W. N. Wright in July, 1961, at the age of 81, the Guild has lost one of its oldest members. Before entering Kew Mr. Wright spent two years in the garden of Duffield Hall, Derbyshire, and five years in the nursery of William Barron & Son, Elvaston Nurseries, Burrowash, Derbyshire, at that time probably the leading firm specializing in the moving of large specimen trees and shrubs, often with the aid of transplanting machines similar to those formerly in use at Kew.

Mr. Wright entered Kew in August, 1898. He worked in the Herbaceous Department, the Palm House, including most of the time in No. 15, the Water Lily House and the Tropical Propagating Department. At that time the working hours for student gardeners were 6 a.m. to 6 p.m. in summer with one Saturday afternoon in four off. Mr. Wright was a good fast bowler and two or three evenings a week in summer, practice at cricket on Kew Green was a favourite sport after a long day in the Palm House.

At this time many Kewites were obtaining posts abroad, but Mr. Wright, wishing to stay in England and gain experience in public parks, applied for work in Hyde Park under Mr. William Browne, the Chief Superintendent of Parks, an Old Kewite, leaving Kew in April, 1900. Following two years in the propagating houses at Hyde Park Mr. Wright obtained a post with Timothy & Sandwith, the Horticultural Sundriesmen of Bracknell, Berks., where he remained for about ten years until early in the first world war in 1914.

Mr. Wright joined up with the Motor Transport Water Tank section of the Army Service Corps.

A. OSBORN.

We thank Mr. Osborn, who entered Kew as a Student Gardener in 1899, for the above details. Mr. Osborn has many happy memories of those "far-off" days and knew Wright very well as a young man. He remembers going to a Cup-Final at Crystal Palace with him when Sheffield United, much to Wright's disgust, beat Derby, 1---0. We cannot find sufficient details to complete this obituary but to the best of our knowledge Wright

kept a garage for many years between the wars. He retired at the age of 65 years. During his retirement he became Chairman of the Local Produce Association and visited many of the surrounding villages to judge their shows.

We send our sincere sympathies to his wife, who is 85, and his daughter, Mrs. E. M. Adkins.

(If any member is able to help with further details we would be pleased to receive them).

In August, 1961, Mr. A. F. Derrick (1960) wrote of his marriage to Miss Olive M. Cairns at Hendon Methodist Chapel, Sunderland, Co. Durham, on 22nd May, 1961. Yet in December he wrote of his wife's death on 4th November. Mr. Derrick writes—" though so brief, our marriage was a most happy and successful one."

We extend our heartfelt sympathies.

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We also regret to announce the deaths of the following Kewites : ---

Dr. W. B. Turrill, on 15th December, 1961.

Major F. R. Long, in December, 1961.

Rev. W. C. Smith, on 16th July, 1958.

A. Poetsch (1903), on 4th July, 1951.

J. Boorman (1885), who passed away over 20 years ago.

S. G. Cutting (1938), during 1961.

Same and the

Miss V. M. H. Harvey (1917), in March, 1961.

We hope to publish obituaries which will serve as fitting tributes to our past members in the next issue (1962). We would be grateful for more information upon the careers of Rev. W. C. Smith. A. Poetsch and J. Boorman,

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KEW STAFF LIST

(As on 1st December, 1961)

* Life Member of The Guild. † Past President of The Guild. ‡ Formerly a Student Gardener.

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	New
G. Taylor, D.Sc., F.R.S.E., F.L.S., V.M.H.	1956
‡†C. E. Hubbard, O.B.E., D.Sc., F.L.S.	1920
R. W. King, D.F.C	1959
B. E. Haines	1960
R. Fender	1958
S. J. Williamson	1959
Mrs. A. L. Casey	1961
Mrs. A. M. E. Kendall	1947
G. F. Lamb	1951
G. Calcutt	1959
H. D. Barlow	1961
F. A. Cole	1961
Mrs. S. M. Shury	1960
Miss I. C. McFarlane	1959
Mrs. H. Walters	1961
Miss C. M. Newall	1952
Miss F. V. Surplice	1954
Miss B. Saunders	1961
Mrs. M. Longman	1947
Miss J. Lane	1957

E. W. B. H. Milne-Redhead, T.D.,	
M.A., F.L.S.	1929
V. S. Summerhayes, O.B.E., B.Sc.	1924
N. Y. Sandwith, M.A., F.L.S.,	1/21
F.R.G.S.,	1924
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. Brenan, M.A., B.Sc., F.L.S.	1948
J. B. Gillett, M.A., F.L.S., (D.T.C.)	1948
*J. R. Sealy, B.Sc., F.L.S	1927
R. D. Meikle, B.A., LL.B., F.L.S.	1947
S. G. Harrison, B.Sc	1949
H. H. Heine, Dr.Med., Dr.Rer.Nat.,	
F.L.S. (D.T.C.)	1958
W. D. Clayton, B.Sc., A.R.C.S.,	
F.L.S.	1958
D. A. Reid, B.Sc.	1951
F. N. Hepper, B.Sc., F.L.S.	1950
L. L. Forman, B.Sc., F.L.S	1951
N. K. B. Robson, B.Sc., Ph.D.,	
F.L.S. (D.T.C.)	1956
Miss B. J. Youngman, B.Sc	1950
P. F. Hunt, M.Sc., F.L.S	1959
Miss F. M. Jarrett, M.A., Ph.D	1959
E. R. Guest, B.Sc., A.R.C.S.,	Sector Parameter
A.I.C.T.A. (Iraq.)	1959

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R. Polnill (D.T.C.)	Miss S. Carter (Mrs. Holmes),	10.55
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J. K. Telmant, B.Sc., F.L.S. (D. 1.C.) 1952 Miss S. S. Hooper, B.Sc., F.L.S 1952 Miss M. I. Skan (Index Kewensis) 1959 D. Philcox, F.L.S 1959 C. C. Townsend	R. Polhill (D.T.C.)	
J. K. Telmant, B.Sc., F.L.S. (D. 1.C.) 1952 Miss S. S. Hooper, B.Sc., F.L.S 1952 Miss M. I. Skan (Index Kewensis) 1959 D. Philcox, F.L.S 1959 C. C. Townsend	D. R. Hunt (D.T.C.)	
J. K. Telmant, B.Sc., F.L.S. (D. 1.C.) 1952 Miss S. S. Hooper, B.Sc., F.L.S 1952 Miss M. I. Skan (Index Kewensis) 1959 D. Philcox, F.L.S 1959 C. C. Townsend	R. A. Blakelock, B.Sc., F.L.S	
J. K. Telmant, B.Sc., F.L.S. (D. 1.C.) 1952 Miss S. S. Hooper, B.Sc., F.L.S 1952 Miss M. I. Skan (Index Kewensis) 1959 D. Philcox, F.L.S 1959 C. C. Townsend	P. G. Taylor, F.L.S.	1948
J. K. Telmant, B.Sc., F.L.S. (D. 1.C.) 1952 Miss S. S. Hooper, B.Sc., F.L.S 1952 Miss M. I. Skan (Index Kewensis) 1959 D. Philcox, F.L.S 1959 C. C. Townsend	J. K. P. Kennedy-O'Byrne, F.L.S.	
D. Philcox, F.L.S	J. R. Tennant, B.Sc., F.L.S. (D.T.C.)	1956
D. Philcox, F.L.S	Miss S. S. Hooper, B.Sc., F.L.S	1952
D. Philcox, F.L.S	Miss M. I. Skan (Index Kewensis)	
M. J. S. Sands. 1959 M. Evans 1959 D. V. Field, B.Sc. 1960 D. N. Pegler, B.Sc. 1960 Miss J. K. Bowden. 1949 Miss D. E. M. Oliver. 1955 Miss J. Forster. 1941 Miss I. Blewett. 1941 Mrs. A. D. Sceats (part-time, D.T.C.) 1952 Miss J. E. Hawkins (Index Keweensis) 1956 Miss J. E. Hawkins (Index Keweensis) 1956 Miss J. McEwan. 1956 Miss D. Moscoff (D.T.C.) 1957 Miss V. Mann. 1956 Miss S. K. Walton. 1957 Miss K. R. Rutherford (D.T.C.) 1957 Miss K. R. Walton. 1956 Miss M. A. Grierson. 1956 Miss M. A. Grierson. 1956 Miss M. Kierans. 1956 Miss M. Kierans. 1956 Miss M. Kierans. 1957 Miss M. Kierans. 1956 Miss M. Kierans. 1956 Miss M. Kierans. 1956 Miss M. Kierans. 1957 Miss M. Kierans. 1956 Miss	D. Philcox, F.L.S.	
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Miss D. E. M. Onver	D. V. Field, B.Sc	
Miss D. E. M. Onver	D. N. Pegler, B.Sc.	
Miss D. E. M. Onver	Miss J. K. Bowden	
Miss I. Blewett	MISS D. E. M. Oliver	
Mrs. A. D. Sceats (part-time, D.T.C.) 1957 Miss I. L. M. Fletcher, A.L.S 1952 Miss J. L. M. Fletcher, A.L.S 1956 Miss P. Halliday. 1947 Miss J. E. Hawkins (Index Kew- ensis) 1956 Miss J. McEwan. 1956 Miss J. McEwan. 1956 Miss J. McEwan. 1956 Miss J. McEwan. 1957 Miss A. C. Ucklein. 1957 Miss D. Moscoff (D.T.C.). 1957 Miss V. Mann. 1956 Miss T. A. Bence. 1956 Miss S. K. Walton. 1955 Miss R. Rutherford (D.T.C.). 1961 Miss R. Rutherford (D.T.C.). 1966 Miss M. A. Grierson. 1966 R. C. C. Desmond, F.L.A. 1966 Miss M. Kierans. 1966 Miss M. Kierans. 1965 Miss H. M. White. 1955 H. M. Williams. 1966 Miss M. McCallum-Webster. 1955 Miss J. Packham. 1966	Miss J. Forster	
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Miss S. K. Walton. 1959 Miss F. L. Mills. 1960 Miss R. Rutherford (D.T.C.) 1961 R. R. Zabeau. 1956 Miss M. A. Grierson. 1966 R. C. C. Desmond, F.L.A. 1966 Miss M. A. Grierson. 1966 R. Davidge, B.A., A.L.A. 1955 Miss M. Kierans. 1933 Miss M. Kierans. 1966 Miss H. M. White. 1955 H. M. Williams. 1966 H. K. Airy-Shaw, B.A. 1955 Miss J. Packham. 1966 Mrs. H. Wotten. 1955 Miss J. Packham. 1966	ensis)	
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Miss S. K. Walton. 1959 Miss F. L. Mills. 1960 Miss R. Rutherford (D.T.C.) 1961 R. R. Zabeau. 1956 Miss M. A. Grierson. 1966 R. C. C. Desmond, F.L.A. 1966 Miss M. A. Grierson. 1966 R. Davidge, B.A., A.L.A. 1955 Miss M. Kierans. 1933 Miss M. Kierans. 1966 Miss H. M. White. 1955 H. M. Williams. 1966 H. K. Airy-Shaw, B.A. 1955 Miss J. Packham. 1966 Mrs. H. Wotten. 1955 Miss J. Packham. 1966	(DTC)	1055
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Miss S. K. Walton. 1959 Miss F. L. Mills. 1960 Miss R. Rutherford (D.T.C.) 1961 R. R. Zabeau. 1956 Miss M. A. Grierson. 1966 R. C. C. Desmond, F.L.A. 1966 Miss M. A. Grierson. 1966 R. Davidge, B.A., A.L.A. 1955 Miss M. Kierans. 1933 Miss M. Kierans. 1966 Miss H. M. White. 1955 H. M. Williams. 1966 H. K. Airy-Shaw, B.A. 1955 Miss J. Packham. 1966 Mrs. H. Wotten. 1955 Miss J. Packham. 1966	Miss D Moscoff (DTC)	
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Miss S. K. Walton. 1959 Miss F. L. Mills. 1960 Miss R. Rutherford (D.T.C.) 1961 R. R. Zabeau. 1956 Miss M. A. Grierson. 1966 R. C. C. Desmond, F.L.A. 1966 Miss M. A. Grierson. 1966 R. Davidge, B.A., A.L.A. 1955 Miss M. Kierans. 1933 Miss M. Kierans. 1966 Miss H. M. White. 1955 H. M. Williams. 1966 H. K. Airy-Shaw, B.A. 1955 Miss J. Packham. 1966 Mrs. H. Wotten. 1955 Miss J. Packham. 1966	Miss T A Bence	
N. K. Zabeau. 1930 Miss M. A. Grierson	Miss S K Walton	1959
N. K. Zabeau. 1930 Miss M. A. Grierson	Miss F. L. Mills	1960
N. K. Zabeau. 1930 Miss M. A. Grierson	Miss R. Rutherford (D.T.C.)	1961
Miss M. A. Grierson		1956
Miss M. Kierans	Miss M. A. Grierson	1960
Miss M. Kierans	R. C. C. Desmond, F.L.A	1961
Miss M. Kierans	R. Davidge, B.A., A.L.A.	1958
Miss M. Kierans	Miss K. E. W. Rattue	1961
H. K. Airy-Snaw, B.A	Miss M. Kierans	1934
H. K. Airy-Snaw, B.A	Mrs. P. G. Warris	1961
H. K. Airy-Snaw, B.A	Miss H. M. White	1959
H. K. Airy-Snaw, B.A	H. M. Williams	1961
Miss J. Packham	H. K. Airy-Shaw, B.A	1958
Miss J. Packham	Miss M. McCallum-Webster	1959
Mrs H Waattan 104	THIS IN, MOCUNUM WOOSterman	1757
Mrs. H. Wootton.194Miss D. J. Bowman.195Miss I. E. Farrow.194Mrs. L. Glenister.195Mrs. D. J. Mitchell.195Mrs. M. W. Glover.196Mrs. H. Dzilna.195		1960
Miss D. J. Bowman.195Miss I. E. Farrow.194Mrs. L. Glenister.195Mrs. D. J. Mitchell.195Mrs. M. W. Glover.196Mrs. H. Dzilna.195	Mrs. H. Wootton	1949
Miss I. E. Farrow. 194 Mrs. L. Glenister. 195 Mrs. D. J. Mitchell. 195 Mrs. M. W. Glover. 196 Mrs. H. Dzilna. 195	Miss D. J. Bowman	1953
Mrs. L. Glenister	Miss I. E. Farrow	1948
Mrs. D. J. Mitchell. 195 Mrs. M. W. Glover. 196 Mrs. H. Dzilna. 195	Mrs. L. Glenister	1956
Mrs. M. W. Glover	Mrs. D. J. Mitchell	1959
Mrs. H. Dzilna 195	Mrs. M. W. Glover	1960
	Mrs. H. Dzilna	1954

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DEPARTM	ent of Economic Botany	
Keeper (Pr	ncipal Scientific Officer)	
Principal S	cientific Officer (Quarantine	;
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Experiment Exhibition	al Officer (Guide Lecturer) Officer	
Assistant (S	cientific)	
Museum C	aftsman	
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	Entered
	Kew
Miss Q. V. Skan	1959
Miss I. L. Taylor	1959
Mrs. V. E. Baker	1959
Miss Q. V. Skan Miss I, L. Taylor Mrs. V. E. Baker G. D. Gibbs Mrs. L. A. Kell Miss. C. M. Bring.	1958
Mrs. I. A. Kell	1949
Miss G. M. Pring. Mrs. E. McKinnell. Mrs. H. M. Skews (D.T.C.) Mrs. B. Doughty. Mrs. I. M. Chambers	1954
Mrs F McKinnell	1960
Mrs H M Skews (DTC)	1953
Mrs. P. Doughty	1961
Mrs. T. M. Chambars	1961
Mis. I. M. Chambers	
Mrs. M. Brind Mrs. B. F. Saunders Miss W. E. Long (D.T.C.) Miss V. A. Cole	1955
Mrs. B. F. Saunders	1952
Miss W. E. Long (D.I.C.)	1959
Miss V. A. Cole	1960
Miss P. A. Godfrey	1960
Miss P. A. Godfrey W. A. Mullins	1942
C. R. Metcalfe, M.A., Ph.D., F.L.S. K. Jones, B.Sc., Ph.D Miss M. Y. Stant, B.Sc., Ph.D Miss M. Gregory F. Richardson	1930
K. Jones, B.Sc., Ph.D.	1960
Miss M. Y. Stant, B.Sc., Ph.D	1950
Miss M. Gregory	1961
F. Richardson	1934
with the main of the main and t	1950
Miss C. A. C. Gabriel	1961
F. N. Howes, D.Sc	1925
T. A. Russell, B.Sc., A.R.C.S. A.I.C.T.A., Dip. Agric Miss R. C. R. Angel, B.Sc A. L. Jewell. Mrs. B. Christopher, N.D.D	1054
A.I.C.I.A., DIP. Agric	1954
Miss R. C. R. Angel, B.Sc	1959
A. L. Jeweil	1960
Mrs. B. Christopher, N.D.D.	1960
A. J. Parkes	1960
A. J. Parkes Mrs. D. M. Richards Miss V. Horwill	1961
Miss V. Horwin	1951
*‡L. Stenning, M.B.E., A.H.R.H.S ‡S. A. Pearce, A.H.R.H.S., F.Inst.	1925
P.A. (Arboretum North)	1928
[‡] G. H. Preston, F.L.S. (Herbaceous)	1934
P.A. (Arboretum North). ‡G. H. Preston, F.L.S. (Herbaceous) *‡S. W. Rawlings (Tropical) ‡J. E. S. Souster, N.D.H., F.L.S.	1936
(Temperate) ‡G. E. Brown, N.D.H. (Arboretum S.)	1943
tG E Brown NDH (Arboretum S)	1946
G. J. E. Yates (Decorative) G. H. Anderson, B.E.M. (Palm	1961
U. H. Anderson, B.E.M. (Palm	1040
House	1940 1949
H. J. Jackman (Decorative)	
H. J. Jackman (Decorative) W. Bridle (Temperate House Pits) H. Bruty (Ferneries—Tropical)	1946
H. Bruty (Ferneries—Iropical)	1946
r. G. Snutler (Arboretum)	1946
A. J. Hale (Temperate House)	1955
F. Larkoey (Decorative)	1947
 H. Bruty (Fernenes—Tropical) P. G. Shutler (Arboretum) ‡A. J. Hale (Temperate House) ‡F. Larkbey (Decorative) ‡G. Nicholson (Orchids—Tropical) ‡A. G. Cook (Herbaceous and Rock Garden—Prop.) ‡R. L. Rever (Alnine and Herbaceous) 	1947
Garden—Prop.) ‡R. I. Beyer (Alpine and Herbaceous)	1948
	1959
F. J. Sadler (Arboretum N.)	1951
F. J. Sadler (Arboretum N.) A. D. Schilling (Arboretum Prop.)	1959
J. B. Simmons (Tropical Prop.)	1958

91

					Kew
Shorthan	d Ty	z p is	t	Miss A. G. Barton	1953
Storekeer				C. R. Claxton	1960
			Pests Operator	H. Allen	1958
				J. Paske	1929
**				J. Mateer	1952
	· Őr		I	C. W. Preston	1922
••		••		C. H. Bowditch	1958
,,		,,		F. L. Burnell	1946
		"		J. P. Byrne	1952
"		"		H. Hockley	1942
**		"		F. H. Jackman	1940
,		"		E. W. Macdonald	1950
**		,,		E. Skyrme	1947
.,		••		J. Slater	1945
,		••		A. D. Stevens	1956
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,		‡R . Rule	1956
"		"		J. Pruuden	1956
		,, ,,		D. J. W. Bernard	1960
		"		A. T. Oakley	1958
		.,		P. M. Lambie	1961
**		"		J. M. Kerr	1961
,		"		F. G. Greenough	1958
,,		,,		M. J. Harrington	1960
**		,,		E. A. Pooley	1935
,		"		G. P. Oakely	
"				Miss V. A. Carder	1955
,,		,,		Miss G. Dawson	1959
Const					
Sergeant	ın	Ch	arge	W. Leaver, B.E.M	1935

STUDENT GARDENERS.

Name	Entered Kew	Name	Entered Kew
J. Aldous	. 1960	J. N. Jayman	. 1958
R. B. Anwyl	. 1960	G. J. Leaver	. 1961
M. E. Baren	. 1960	S. Linnegar	. 1957
R . C. A. Barnett	. 1960	J. A. Maddox	. 1961
R . C. Bauman	. 1961	C. D. Mason	. 1961
H. Bell	. 1961	T. Matthews	
D. J. Breach	. 1961	A. J. Mitchell	
P. T. Bridgman, N.D.H		F. Rahman	. 1961
P. S. Brooks	1961	J. M. Rainey	. 1959
G. A. Cook	. 1960	A. J. Rose	. 1961
B. Dodds	. 1959	C. D. Sayers	. 1960
D. T. Evans	. 1960	J. D. H. Smith	. 1961
K. M. Fellows	. 1961	D. W. Taber	
J. M. Gabe	1960	M. J. Theron	
J. B. Gaggini	1961	M. Tyas	. 1961
C. J. Giles	. 1960	R. C. Ward	
M. J. Griffin	1961	J. F. Warrington	
R. T. Harrison	1960	J. A. E. Whitehill	
J. D. Higham	1961	K. R. Woolliams	. 1961
D. H. Holmes	1960		

IMPROVERS AND BOYS.

D. R. Burdett, B. W. Croston, R. K. Edwards, W. Q. Emm, T. N. Fairhurst, P. A. Giles, A. E. Horrocks, J. K. McGrath, A. R. Mitchell, D. A. V. Morgan, G. Mullinger, D. M. Norris, J. F. Norris, J. W. Reynolds, S. C. Scarr, P. F. Smith, P. Spedding, D. Waddell, E. A. Williams, J. Woodhams.

Entered

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ADDRESS LIST OF OLD KEWITES

1. 56.

(The Names of Past Presidents are preceded by a dagger, Life Members by an asterisk) (The year of leaving Kew is indicated)

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

- 1936.
- 1959.
- 1938.
- 1957.
- Abbing, J., Beauwea Park, P.B., Grahamstown, S.A. Adams, R., 45 Hillcrest Road, Offerton, Stockport, Cheshire. *Addison, G. H., Meadowcroft, Hanley Down, Nr. Battle, Sussex. Addison, P., N.D.H., 14 Tauton Road, Wallasey, Cheshire. Adshead, P., 134 Cherry Tree Lane, Great Moor, Stockport, Cheshire. Agate, C. J., 7 Beach Road, Great Neck, Long Island, N.Y., U.S.A. Ainslie, E., Head Gardener, Southend Parks Dept., Southend. *Airav, L.F. Westmoor, Gardener, Mangel, Laoy, Hereford 1960.
- 1926.
- 1949.
- 1939.
- *Airey, J. E., Westmoor Gardens, Mansel Lacy, Hereford. *Albert, Mrs. H. (Miss H. J. Stent), 65 Summet Street, Oyster Bay, Long Island, 1945.
- 1918. 1946.
- 1948.
- 1930.
- 1911.
- 1956.
- 1945.
- 1957.
- 1926.
- 1910.
- 1956.
- 1947.
- 1922.
- 1954.
- 1947.
- 1931.
- 1920.
- 1956.
- *Airey, J. E., Westmoor Gardens, Mansel Lacy, Hereford.
 *Albert, Mrs. H. (Miss H. J. Stent), 65 Summet Street, Oyster Bay, Long Island, N.Y., U.S.A.
 *Alcock, Mrs. N. L., M.B.E., F.L.S., 108 Cole Brook Street, Winchester, Hants. Allen, Miss B. (See Mrs. F. Christopher).
 Allen, F. H., Coombe Villa, Wotton-under-Edge, Glos.
 Allison, B. W., D. Parks Dept., Salford, Lancs.
 *Allt, W. S., E. Market Street, Hyde Park, N.Y., U.S.A.
 Alphonso, A. G., B.G., Singapore, S.S.
 *Ambrose, Miss R. M. (See Mrs. J. Souster.)
 Amoah, G. K. A., Ministry of Works and Housing, P. & Gdns. Div., P.O. Box 43, Accra, Ghana.
 *Anderson, A. W. C., N.D.H.(N.Z.), 224 Church Street West, Timaru, N.Z.
 *Anderson, J. W., 30 Sandilands Road, Baguley, Manchester, 23.
 Andrews, B. R., Park Dept., City Hall, Edmonton, Alberta, Canada.
 Andrews, R. H., 67 Chiltern Avenue, High Wycombe, Bucks.
 *Andrews, W. G., 15 Lindsay Avenue, Levenshulme, Manchester, 19.
 Appleby, J., 53 Rathbone Road, Wavertree, Liverpool, 15.
 *Armstrong, C. E., N.D.H., H.L., Kesteven Farm Inst., Caythorpe Court, Nr. Grantham, Lincs.
 *Arnold, T. A., 157 Jeppe Street, Johannesburg, S.A.
 Ash, Mrs. W. (E. M. Harper), 22 Palace Court, Hampstead, N.W.3.
 Ast, R., Duggelistrasse, 9, Cham/Z.G., Switzerland,
 Atkins, L. G., N.D.H., 14 Wharfedale Drive, Fosse Estate, Newark Road, Lincoln. 1931. Lincoln.
- Atkinson, Miss A. L. M., Elton House, High Street, Uppingham, Rutland. Atkinson, G., Kew Cottage, Calstock Road, Gunnerslake, S.E. Cornwall. Attenburrow, D. C., c/o D. of Agriculture, P.O. Box 338, Nairobi, Kenya. Attwood, C. A., "Bel Air," Ulgham, Morpeth, Northumberland. *Aubrey, A. E., 83 Newbridge Street, Wolverhampton, Staffs. Avery, Edwin, 2 Newport Road, Barnes, S.W.13. 1958.
- 1960.
- 1954.
- 1950.
- 1910.
- 1946.
- 1939. *Aves, J. J., D.S., P.O. Box 1454, Parks Dept. Pretoria, S.A.
- 1935.
- 1906.
- 1920.
- 1920.
- 1947.
- Bachelor, P. L., Glenchairn, Dover Ridge Avenue, Carlton, Nottingham.
 *Badgery, R., 47 King's Ash Road, Paignton, Devon.
 *Baker, A. F., 15 Beresford Road, Kingston-on-Thames, Surrey.
 *Baker, E., The Myrtles, Bucknells Lane, Yarston, Herts.
 Baker, M. E., 18 Jealotts Hill, Warfield, Berks.
 *Balch, R. W., N.D.H.(N.Z.), A.S. of Reserves, 32 Montague Road, Dunedin, New Zealand. 1939.
- 1961.
- 1908.
- 1927.
- 1928. 1958.
- New Zealand.
 Banbury, J. N., 11 Via San Giorgio, Castagnola, Lugano, Switzerland.
 *Band, R., P.O. Box 524, Accra, Ghana.
 *Banfield, F. S., F.L.S., 35 Luckley Road, Wokingham, Berkshire.
 Barham, V. G., "Ivermark," Arnolds Lane, Sutton-at-Hone, Dartford, Kent.
 Barker, L. P., 120 Victoria Road, Fulwood, Preston.
 *Barker, W. H., N.D.H., M.C., The Thatched Cottage, Rodney Stoke, Nr. Cheddar, Somerset. 1923.

- 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.