THE KEW GUILD

IMPORTANT NOTICE.

In May, 1925, an appeal was launched which had as its objective the raising of £1,000, as a fund to be known as the "Kew Guild Educational Fund." The initial response resulted in about £120 being raised, and at the Annual General Meeting in 1927, this sum was augmented by transferring the balance of the Watson Memorial Fund to the Educational Fund, and it was further resolved that the Fund should be known as the Watson Memorial Educational Fund "as a fitting memorial to the memory of the late Mr. William Watson, A.L.S., V.M.H."

From time to time small grants have been made from the accrued interest to Student Gardeners at Kew, but this assistance has so far been confined solely to the refund of entrance fees to those who had been successful entrants for the R.H.S. National Diploma in Horticulture.

The total fund now stands at about £150, of which some two-thirds are invested in a trustee stock. It will be appreciated that the Guild's assistance has of necessity to be very limited.

During recent years, Students at Kew have had increasing opportunities of taking part in exchange arrangements, not only with continental botanic gardens, etc., but also latterly with Colonial institutions. In spite of these opportunities Students are often prevented, from financial reasons, from taking advantage of these facilities.

Here, then, is an opportunity for Members of the Guild to do something for the Present and the Future generations of Kewites. It is proposed once more to invite subscriptions from all Members of the Guild to be devoted to the Watson Memorial Educational Fund. In this connexion it is worth noting that the Guild Committee have already agreed to advance a sum of up to Fifteen Pounds towards the expenses of a Student proceeding to Canada in the near future.

Our aim is to raise £1,000, and the formation of our Fund on a secure basis we are sure will appeal to all Kewites, and especially to those who have seen service overseas and know the value of personal contact between Kew and the Empire.

Subscriptions and donations should be forwarded to the Hon. Treasurer, The Kew Guild, Royal Botanic Gardens, Kew, Surrey.

> J. S. L. GILMOUR, Chairman of Committee.

J. COUTTS,

Curator of the Gardens.

E. G. DUNK,

Hon. Secretary, Kew Guild.

May 1st, 1935.



THE

JOURNAL

OF THE

KEW GUILD,

AN ASSOCIATION OF

KEW GARDENERS, Etc.

PAST AND PRESENT.

APRIL, 1935.

LIST OF OFFICERS.

President: 1934-35: William Hales, A.L.S., V.M.H., A.H.R.H.S.

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

Hon. Treasurer: L. Stenning, Royal Botanic Gardens, 197, Kew Road, Kew, Surrey. (To whom all remittances should be addressed.)

Hon. Secretary and Editor of Journal . E. G. Dunk,

197, Kew Road, Kew, Surrey.

Members of Committee:

Retire 1935.

W. Sharp, Durham. J. Coutts, Kew.

C. H. Curtis, London.

F. S. Banfield (late of F.M.S.).

W. Gullick, Salisbury.

Retire 1936.

J. S. L. Gilmour, Kew.

W. Lamberton, Wye. J. McPherson, New Zealand.

W. L. Lavender, Raynes Park.

Sub-Foreman: G. R. GROVES.

Retire 1937.

G. W. Robinson, Kew.

A. B. Melles, M.B.E., France.

C. Jones, Ware, Herts.

W. H. Judd, U.S. America.

Retire 1938.

A. Osborn, Kew.

R. S. Lynch, Totnes.

W. M. Campbell, Southend.

F. R. Long, South Africa.

Student-Gardener: G. E. DEAN.

CONTENTS.

WILLIAM HALES, A.L.S., V.M.H	., A.I	H.R.H.	S	From	ntisp	piece
MEMOIR—WILLIAM HALES, A.L.S	S., V.	M.H.,	A.H.F	R.H.S.		405
Annual General Meeting, 1934						408
Annual Dinner, 1934				• • •		409
THE CRICKET CLUB, 1934						418
THE FOOTBALL CLUB, 1934				• • •		420
THE SOCIAL CLUB						421
THE SWIMMING CLUB, 1934						421
THE BRITISH BOTANY CLUB, 1934						422
THE MUTUAL IMPROVEMENT SOCIE	ту, 19	33-34				424
The Lectures, 1934						425
Notes and Gleanings						426
Wedding Bells				•••		430
Kewites as Authors						431
STRUCTURAL AND OTHER CHANGES	ат К	EW				432
A Kewite in Australia						434
NOTES FROM ST. HELENA			•••			436
THE ASSOCIATION OF NEW ZEALS	AND K	EWITES				439
THE ASSOCIATION OF KEW GARDE	ENERS	IN AME	RICA	• • •		439
A MOROCCAN MOTOR RIDE		***	•••			440
AN OLD KEWITE'S VISIT TO BERM	IUDA A	ND THE	West	Indies		447
PORT ELIZABETH						457
IN MEMORIAM: W. E. Broadway W. Fox; J. Fraser; W. H. O.	Gostlin	E. Bro	wn; Tones;	. Cauk H. Ker	er ; np-	
shall; W. Manning; R. Ward						46 0
KEW STAFF				•••	• • • •	472
DIRECTORY OF OLD KEWITES			•••	•••		474
Advertisers						i-xvi

In 1899 the Old Chelsea Physic Garden, which through years of neglect had fallen into a very dilapidated condition, passed from the hands of the Society of Apothecaries, which had owned it for over 200 years. This Society now found itself unable to continue to support it out of their corporate funds, and so the garden passed to the City Parochial Foundation. Kew was asked to find a Curator, and W. Hales, who at this time was twenty-five years of age, was called upon to see what could be done to make a real live garden for London Botanical Students. All who have been to Chelsea Physic Garden, with its large collection of plants, both under glass and in the open, and its well-kept garden, know fully that he has more than succeeded, particularly when we consider the climatic conditions that have to be contended with, in the heart of London. W. Hales and the Chelsea Physic Garden have rendered invaluable service, not only to students but to research workers in diverse botanical subjects.

Our President's ability has been recognized in various ways, and for many years he has been a member of the Scientific Committee of the Royal Horticultural Society, and has now been invited to serve on the Committee of "Floral B.," where his knowledge of plants will be of valuable service. He has also been on the Board of Examiners from its inception.

At the International Exhibition in 1912 he was asked to read a paper on "The Education of Gardeners" at the Educational Conference in connection with the Exhibition. When it was decided to set up a National Diploma in Horticulture for Gardeners, W. Hales was placed on the committee that drew up the scheme, being appointed one of the examiners for the Diploma in 1913, and served in that capacity for several years. He has also acted from time to time since 1912 as one of the judges of the Royal Horticultural Society's Spring and Autumn Shows, including the International Exhibition of 1912.

When the B.Sc. in Horticulture was instituted by the University of London, Hales was asked to be their external examiner in "The Practice of Horticulture," and when Reading became a University he was asked to act in a similar capacity as their examiner for the same degree in Horticulture, and is still acting as such. He also examined for the Institute of Landlord Property Owners, and for Swanley Horticultural College. He has served on the committee of the Kew Guild, and was its chairman for three years.

In 1912, in recognition of his service to Horticultural Science, he was made one of the Associates of the Linnean Society of London, which are limited to twenty-five in number.

In 1926 the Trustees of the Chelsea Physic Garden, to shew their appreciation of his work, decided to send him on a four months' tour of the tropics, and nothing could have given him more pleasure than this opportunity of seeing some of the plants with which he is so familiar, growing in their natural habitat. He sailed on the 3rd of December for Ceylon, visiting Kandy, Peradeniya, Hakgala, and other important horticultural centres. From Ceylon he went to Penang, Singapore and other Malay States, and then on to Java,

visiting several of the extensive Botanic Gardens, finally returning to Singapore, where he took the boat for home, arriving back in March, 1927. During this trip he met a number of old Kewites and fellow Guilders, who had made arrangements which enabled him to see much that he otherwise would have missed. He gave a lecture on his tour to The Royal Horticultural Society in November, 1927, and later to other Institutes.

In February, 1930, The President and Council, on behalf of the Royal Horticultural Society, in recognition of his services to Horticulture and Botany, awarded him the Veitch Memorial Medal and £25, and in 1932 he was elected an Associate of Honour, and it gives his many friends great pleasure to see his name in the last list of those who received the Victoria Medal of Honour. All these honours have been thoroughly merited, and long may he live to enjoy them.

The Borough of Chelsea often seeks his advice regarding the care and attention of trees in the streets and open spaces, while outside horticulture they have already claimed his services as one of their co-opted members of the Public Library Committee. Those who know Hales, are fully aware that no one who goes to him to ask advice or assistance, asks in vain.

That he may be spared for many years to carry on the good work he is doing is the wish of his many friends at home and overseas.

F.G.P.

Mr. H. Davies, supported by Mr. G. Lamb, proposed that Mr. William Hales, A.L.S., A.H.R.H.S., be elected President for 1934-35. This proposal was enthusiastically approved and Mr. Hales expressed his great satisfaction and appreciation of the honour accorded him in a few, but well-chosen sentences.

Some discussion followed when the proposal to change the existing badge of the Guild was brought forward by Mr. G. Wheeler. Mr. Wheeler passed round for inspection a suggested design which had been prepared by the Students at Kew, together with a colour drawing of a suggested tie. The proposal had the general approval of those present, but it was ultimately agreed that the matter should be left in the hands of the Guild Committee being more in touch with the wishes of present Kewites, who at any rate had already intimated that a change was desirable.

The Hon. Secretary referred to the grant of 10/- per week from the Benevolent Fund which had been made by the Committee, to the Guild's oldest member, Mr. John Gregory, and read a letter he had received from Mr. Gregory, which concluded with "I cannot find words to express my thankfulness to the Members of the Kew Guild in making me a weekly grant from the Benevolent Fund. It will be a grand help to me and add brightness through the coming winter."

A vote of thanks to the retiring President and to the officers of the Guild for their work during the past year concluded the Meeting.

THE ANNUAL DINNER 1934.

The Annual Dinner was held on May 31st, 1934, at the Clarendon Restaurant, Hammersmith, and a record attendance of 161 members is to be specially noted.

The President of the Guild, Mr. William Hales, A.L.S., A.H.R.H.S. (Curator of the Chelsea Physic Garden), presided, and among a very distinguished company, we are happy to note that Mr. Cecil Hanbury, M.P. (of La Mortola) and Mr. T. Hay, M.V.O., V.M.H. (Superintendent of Hyde Park), were present as guests of honour.

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

Mr. William Hales then prefaced the Toast of the Kew Guild with these very interesting and informative remarks:—

"In the early history of this country a Guild was a Society or Organisation belonging to the same class, trade or pursuits. The name is Saxon in origin, signifying a fraternity which unites and flings its effects into a common stock.

In the middle ages there had grown up Guilds of several kinds such as (1) Peace Guilds like the one founded by Canute for the suppression of the piracy of the Vikings, (2) Social and Religious which were not only for devotional purposes, but also to mutually aid any of its brothers in an emergency, (3) The Trade Guilds, which after the Conquest, were of two orders, Trade and Craft, the former being composed of the Merchants, and the latter the craftsmen, and it was from this craft section that the twelve great Companies of the City of London have sprung. These were followed by lesser Companies, of which one, the Society of Apothecaries, was responsible for the foundation of the Chelsea Physic Garden in the closing half of the 17th Century partly for the instruction of its younger members.

The 17th Century, as most of you know, was a remarkable period of scientific development. In its early half we note the foundation of the Physic Garden at Oxford by Lord Danby, whilst the second part witnesses the foundation of the Royal Society at Oxford by Bishop Wilkins in 1662 and in the same year the National Observatory at Greenwich comes into being. Newton discovers the laws of gravity in 1666, but owing to the then erroneous conception of the earth's diameter, they were not disclosed to the world until 16 years later. Hooke is improving the miscroscope, Boyle the air-pump and also working on Woodward is founding mineralogy, John experimental chemistry. Ray is raising Zoology to the dignity of a science. Robert Morrison is seen laying the foundation of modern Botany at Oxford and N. Grew by that marvellous series of drawings which he has left to us in his Anatomy of Plants, was sharing with Malpighi on the Continent the credit of founding the science of vegetable physiology and anatomy.

Such was the period in which botanical science began to grow into a lusty infant, largely through the work of the Rev. W. Turner—who had a garden somewhere in the neighbourhood of Kew—and also by the publication of Parkinson's and Gerrard's Herbals.

It was the early part of the 18th Century which saw the work at Chelsea of Philip Miller, who among his pupils had a young man named Aiton whom he sent to Kew to take charge of the Dowager Princess of Wales' garden. The work of Aiton and his son, by whom he was succeeded, made the Kew garden of that period one of great interest.

Dr. Solander and Sir Joseph Banks were also pupils of Miller, both of whom were instrumental in helping the early botanical work of Kew.

Another connection with Chelsea and Kew, which you will pardon me for citing, was that of Dr. Lindley, who among his other numerous offices was Hortus Praefectus of the Chelsea Physic Garden for over 30 years. When the Government set up a commission to report on what should be done with Kew—at that time a private garden—Lindley was asked to be Chairman of the Commission and as you all know the report of this Commission was that it should be made into a national botanic garden, which advice, fortunately for this country and the botanical world at large, was eventually acted upon, and the garden opened to the public in 1841.

Kew has always been fortunate in its Directors, one and all of which have in their several ways brought distinction to their office and by their work made Kew the objective of all aspiring botanists and horticulturists.

Its first Director, Sir William Hooker, soon began the publication of the Floras of various countries which have been of untold benefit to botanical science. He was followed by his even more famous son, Sir Joseph, who, with George Bentham, worked for 22 years on that monumental work *The Genera Plantarum*. Then we have Thistleton Dyer, who, beside carrying on the great work of his predecessors, also devoted his energies to making the garden one of beauty and a place where the occupants were as well-cultivated as the conditions of soil and climate would allow. Sir David Prain followed, bringing his wide knowledge of Indian plants and administrative abilities to throw into the work of Kew. Finally, the work so well initiated by former Directors is being ably continued and extended by our present Director, Sir Arthur Hill.

Apart from this, we ought not to forget the unseen work which has been carried on in the Jodrell Laboratory and especially the work of Dr. Scott (whose loss we deplore) on paleobotany and the anatomy of plants, and also the epoch-making researches of Brown and Escombe on the work of the stomata.

My own earliest introduction to Kew and its work was in my school days, through my schoolmaster, who was a fellow student at Cheltenham College with Sir Daniel Morris (who at that time had been appointed Assistant Director), and Morris was often held up to us boys as an example to try and emulate.

On leaving school I started work in a private garden, afterwards moving on to a market nursery which was owned by an old Kew man, Mr. E. Crump-a brother of the more famous Crump of Madresfield-and here again it was my good fortune to learn more about Kew and its work. Later on I was destined to serve under another distinguished Kewite, W. B. Latham, in the Edgbaston Botanical Gardens, where he had built up a very wide collection of interesting plants. It is of interest to recall the fact that Latham was one of the early Presidents of our Guild. It was at Edgbaston that I found my dear friend Skan, who a year later passed on to Kew, where he remained with distinction to himself and Kew, until his retirement last One can easily understand with my early knowledge gained about Kew that I myself should want to get to Kew, which fortunately I was able to do in 1894-just 40 years ago, and during this long period it has been of great interest to watch the marvellous development of the establishment of which we are all so proud.

I left E. H. Wilson in Edgbaston, but he too soon wanted to come to Kew which he did about a year later, and with what result all the botanical world knows. Then came our friend Hackett, who for several years was in charge of the tropical department before he went to Liverpool, which many contend was a great loss to Kew. Finally, from the same garden came C. P. Raffill who is still with you at Kew helping to steer the great ship on the right course.

I have mentioned these men, even at the risk of being thought to be egotistical, as showing what the spirit of emulation can do, and it is this spirit and the desire even to excel the work of others, that has made our beloved Kew the great establishment it is to-day. Each and every worker in this Guild of Kew men, from the Director downwards, must feel that they have a responsibility to give of their best to the establishment of which each and every one of us are justly proud.

To those of us whose privilege it is to have passed through Kew, we acknowledge the debt of gratitude we owe for the training we received there and the lifelong friendships we made. And to those of you who are now passing through Kew, I venture to suggest that you sieze hold of the golden opportunities which Kew has to give you, not only in the advancement of your profession, but in the lasting friendships you are able to make with kindred spirits, and I ask you one and all, to join with me in the toast of the Kew Guild."

Mr. Hales then presented the annual prizes to the successful Students,

The Matilda Smith Memorial Prize was secured by Mr. Mark Stanley, who, however, was absent owing to serving in the famous La Mortola Gardens, but it was intimated that presentation of volumes, to Mr. Stanley's own choice, would be made when opportunity offered, or at the 1935 Dinner.

The Dümmer Memorial Prize was secured by Mr. J. C. Taylor for an outstanding collection of British Plants during 1933. Mr. Taylor was also awarded the Hooker Prize, which is presented annually by the Director. The Mutual Improvement Society's Prize was gained by Mr. T. R. Clark.

Once again we are indebted to Mr. J. S. L. Gilmour for arranging the entire musical programme, with the enthusiastic co-operation of the following: Messrs. F. C. Brinsley, T. E. Clark, W. Daniels, A. S. Elson, F. Folk, J. Fisher, C. B. Gibbins, L. J. Harding, J. E. Holman, R. D. Hogg, B. M. E. Hoogstad, W. Mort, P. W. Page, I. Sinclair, J. C. Taylor, R. F. Williams, R. Vaughan-Williams and G. Wassell.

The programme was a very varied one and included pianoforte solos, part songs, solo items, the "massed band" (complete with instruments familiar only to an organisation so closely associated with horticulture), comedy turns (by Frank Folk and his fellow conspirator) and the skirl of the pipes (so pleasingly rendered by a true Scot!)

The interval having been taken fullest advantage of by old friends and new acquaintances, Mr. William Dallimore, V.M.H., then proposed the Toast, "Our President," introducing it with these well-chosen remarks:—

"The Secretary informed me a week or two ago that I was to propose the toast of "Our President." I asked him why I had been settled on as the victim? and all I got was, "You know something about him!" I do not know whether the Secretary thought that

I had some spicy knowledge about the President's past life up my sleeve. If he did, he will be disappointed, for from what I know of Mr. Hales he would not know how to begin a shady action, much less carry it through. He hails from Leamington, but I cannot tell you anything about his early years as I could, with more or less accuracy, two years ago about our friend Daniel Bliss. Two possibilities as to our President's origin have occurred to me, one, that he came about in a perfectly orthodox way, being deposited at dead of night on a doorstep by the proverbial stork; the other, and from his name the more likely, that he was salvaged from beneath a gooseberry bush amidst the wreckage of a garden after a violent storm of hail. I do know that William Hales was the second of five student-gardeners who entered Kew from the Botanic Garden, Edgbaston, between the years 1892 and 1898. He was preceded by S. A. Skan—a most estimable man who for many years until a year ago, acted as guide, counsellor and friend to all his colleagues at Kew and to every visitor to the Herbarium—and he was followed by the illustrious traveller, collector and botanist, the late Dr. E. H. Wilson. The remaining members of the quintuplet are Walter Hackett of the Botanic Garden, Liverpool, and one of the present Kew staff, C. P. Raffill. men all received a portion of their training from that excellent gardener and Kewite of a past generation, Mr. W. Latham, for many years Curator of the Botanic Garden, Edgbaston, and the training was supplemented by prolonged evening study at the Birmingham Technical School: thus they entered Kew, not only well-equipped with gardening knowledge and possessing much manipulative skill, but they had also a good grounding in Botany and other subjects calculated to assist them in their several careers.

The earlier Edgbaston people rather embarrassed us less sensitive people by their ultra honesty, as you will gather from the following story. At that time the nurseries were run by a propagator (myself) and a student gardener, and the temperate house pits by a student gardener and a boy, and we invariably had our breakfast in the potting shed. A new student gardener came to Kew who had been in the habit of earning an honest penny in his spare time by the sale of tea. He tried to carry on the agency, and we told him that if he would send us a sample of his tea and we approved of it we would consider buying our breakfast tea from him. He sent us a quarter of a pound and a day or two later demanded sixpence in payment. The two arboretum people argued that we should not be expected to pay for a sample of tea-a sample was a sample all the world over-what was the use of having a sample if we had to pay for it—the temperate house Edgbaston man argued that it would be dishonest not to pay for it. Eventually we persuaded him that the proper thing to do was to give the tea dealer a testimonial. We wrote a beautiful one, in high-class verse (I have seen many a worse one used as an epitaph on a tombstone), and sent him that in lieu of sixpence. But I have always believed that the Edgbaston conscience pricked and that our third man paid the sixpence out of his own pocket, for the tea merchant did not put in another claim, and from what I knew of him and the testimonial, I do not think he would have been satisfied without the sixpence,

Hales began work at Kew on June 4th, 1895, and he was very soon singled out as being not only a good gardener, but as possessing a good general knowledge of plants. At the end of the first year he was promoted to the rank of sub-foreman in the Decorative Department, and owing to his skill as a cultivator the plants grown for the greenhouse and beds during the three following years reached a high degree of excellence, in fact it was an open secret that the late Mr. Watson, at that time Assistant Curator, tried hard to get him transferred to the Tropical Department, but could do nothing with Frank Garrett, Foreman of the Decorative Department. Hales took a very prominent part in the work of the Kew Guild, Mutual Improvement Society and other Student Gardeners' organisations, and though not prominent in sport, he was "hail fellow well met" with his colleagues. He came within an ace of remaining at Kew as a Foreman, for about 1899 Garrett was offered an appointment which he wished to accept, and Hales was spoken to about accepting the position of Foreman should it fall vacant. However, a hitch occurred and Garrett stayed Soon afterwards the appointment at the Physic Garden became available and Hales was appointed to take over the duties on October 2nd, 1899. How well he has filled the post is common knowledge.

For the information of the younger generation I should like to give a few particulars of Mr. Hales's charge.

The Chelsea Physic Garden is a very old institution. It was established by the Society of Apothecaries in 1673, the ground being leased to the Society by Lord Cheyne. A portion of it was used as a site wherein to keep the ornamental barge, which at that time was an essential to an important City Company. The other part was used for the cultivation of herbs for use in the Society's laboratories. However, the expense of upkeep proved to be too great for the Society, and about 1713 the Society approached Sir Hans Sloane for further support. After prolonged negotiations Sir Hans Sloane in 1722 granted them the land, about $3\frac{1}{4}$ acres, for ever, in consideration of a yearly rental of £5, the conditions being that "The said gardens may at all times hereafter be continued as a Physic Garden, and for the better encouraging and enabling the said Society to support the charge thereof, for the manifestation of the power, wisdom and glory of God in the works of the Creation, and that their apprentices and others may better distinguish good and useful plants from those that bear resemblance to them and yet are hurtful, and other the like good purpose."

The name of Sir Hans Sloane thus became intimately connected with the history of this famous garden. He was an ardent gardener himself and doubtless his guidance and generosity had much to do with the success of the garden during the following years.

It is interesting to note that Sir Hans Sloane was concerned with the Chelsea Physic Garden long before his knighthood, during the days when he was studying medicine in London. In 1684 in correspondence with this friend John Ray, a great preacher, naturalist, and philosopher of the seventeenth century, who was the author, amongst other works, of the *Historia Plantarum*, references were made on several occasions to plants in the Chelsea gardens and to Mr. Watts, who

apparently was in charge at that time. The following paragraph is of peculiar interest. It can be found on page 176 of Ray's Letters. "I was the other day at Chelsea and find that the artifices used by Mr. Watts have been very effectual for the preservation of his plants, in-so-much that this severe enough winter has scarce killed any of his fine plants. One thing I much wonder to see that the *Cedrus Montis Libani*, the inhabitant of a very different climate, should thrive here so well, as without pot, or greenhouse, to be able to propagate itself by layers this spring. Seeds sown last autumn have as yet thriven very well and are like to hold out. The main artifices I used to them, has been to keep them from the winds which seem to give a great additional force to the cold, to destroy the tender plants."

Writing to Mr. Ray on November 11th, 1684, Sloane says, "Mr. Watts having a new contrivance, at least in this country, viz.: he makes under the floor of his greenhouse a great fireplace with grate, ash-hole, etc., and conveys warmth through the whole house by tunnels so that he hopes by the aid of weather glasses within to bring or keep the air at what degree of warmth he pleases letting in upon occasion the outward air by the windows. He thinks to make by this means an artificial spring, summer, winter, etc." In another letter dated December 20th, 1684, he wrote: "Yesterday I was at Chelsea Garden to see how the plants were preserved from this cold weather. In the daytime there is fire in the furnace, and in the night there is fire in the furnace and they cover the windows with pitched canvas." Sloane was abroad for several years during which time he sent home seeds of many plants. Later he married a wealthy wife and purchased the Manor of Chelsea in 1720.

The Chelsea Physic Garden bore a great name in the eighteenth century. For many years its activities were controlled by Philip Miller of Gardening Dictionary fame, and when the Dowager Princess of Wales was about to establish a botanic or physic garden at Kew in 1759, she asked Miller to send her a competent man to take charge. He sent her William Aiton the elder, who up to that time was one of his pupils; thus was begun the long association of the Aitons, father and son, with Kew. From this it will be seen that the Chelsea Physic Garden acted the part of nurse to Kew.

Unfortunately no provision was made for the endowment of the Physic Garden and it gradually lost its prominent position. After undergoing many vicissitudes, suggestions were made towards the end of last century as to its disposal, but a number of legal questions were involved and no definite decision was made. Eventually, in 1897, a Treasury Committee consisting of Sir Henry Longley, Sir William Thiselton-Dyer and Mr. Spring-Rice was appointed to decide whether the gardens should be allowed to lapse, or whether they should be reorganised and given a new lease of life. The latter line of action was recommended and eventually a scheme was sanctioned by the Charity Commissioners, whereby the trustees of the London parochial charities should bear a good deal of the expense of the reconditioning and future management of the garden.

This was the position at the time Hales was appointed Curator. I

saw the garden when he took charge. Everything was in a ruinous state, houses and other buildings falling down, and the ground a wilderness of weeds. However, the trustees got to work on new buildings and the Curator got to work on the garden, and in the course of the next two years a new house had been erected for the Curator, and a range of plant houses and a laboratory had been built. Mr. Hales on his part had cleared away weeds, brought in a large quantity of new soil and manure, thoroughly worked and laid out the ground and got together a very large collection of plants. The gardens ever since have been extensively used for research by educational bodies, and many thousands of specimens are supplied annually for botanical purposes. Mr. Hales is in constant touch with University Professors and teachers, and the position would have been a difficult one for some gardeners, but as he was always keenly interested in Botany he has been able to deal sympathetically with questions that are not always in the best interests of general gardening, and in the interests of his botanical friends he has taken care to keep amongst his plant collections an ample supply of plants that, though of no garden merit, are of very great interest and value for teaching purposes. Gardening alone in a position such as that occupied by the Chelsea Physic Garden, must be a heart-breaking experience, but Mr. Hales, by his interest in Botany and other scientific pursuits, has risen superior to the depressing effects on the gardener created by bad atmospheric conditions on plant life.

As a mark of appreciation of his valuable and faithful service his Committee, a few years ago, sent him to Ceylon, Malaya and Java, in order that he might have an opportunity of seeing tropical vegetation in a natural state.

In addition to his work connected with the Physic Garden, Mr. Hales had assisted many outside institutions. He has been a member of the Scientific Committee of the Royal Horticultural Society for many years, and assisted in the work connected with the foundation of the Degree in Horticulture by London University. He has acted as an examiner for that degree, and has also officiated as an examiner for the National Diploma in Horticulture. He has served for several terms on the Kew Guild Committee and was Chairman of the Committee for three years.

He has for many years been an Associate of the Linnean Society, and was appointed an Associate of Honour of the Royal Horticultural Society in 1932, and his friends all hope that the near future will see him the holder of the Victoria Medal of Honour, for no gardener is more worthy of the distinction. [Mr. Hales' name appeared in the 1935 list—Ed.].

As you will have gathered, Mr. Hales took to the Physic Garden as a duck takes to water. Early habits may have helped. When a boy, if he was little off-colour, all that his mother had to do was to say, "Willie, your tummy is out of order, take a bucket to the pump room and ask for a dose of medicine." He then got without payment that for which you and I would be charged sixpence a glass. That is one of the advantages of being reared at a Spa. He missed his

free physic after leaving Leamington, so when opportunity arose he hastened to take up his residence in a Physic Garden where he could inhale the virtues of medicinal plants to his heart's content. Perhaps, in addition to the reviving properties of the plants, a spring of waters exists with merits akin to the medicinal waters prescribed North of the Tweed. Mr. Hales was wise in his generation, for after 35 years of hard work in his Physic Garden, he ails nothing, is still hale and hearty, and if appearance can be relied upon, he may look forward to drinking his Chelsea Ales in the seclusion of the Apothecaries' den for another generation."

Before the final item in the programme was reached the President expressed his thanks to all who had co-operated so successfully in providing such a pleasant evening, and to the Hon. Secretary for the excellent arrangements which meant so much to the success of such a momentous occasion.

Those present were:—

B. W. Allison. J. W. Besant. J. S. L. Gilmour. F. & Mrs. Glover. T. Lomas. F. C. Mack.
J. G. C. MacKenzie
W. W. MacKenzie. A. & Mrs. Best G. E. Gough. (Singapore). Miss M. L. Green. A. E. P. & Mrs. R. Binnington. J. J. Mackintosh.
J. A Mann.
C Matthews. A. Birkinshaw. Griessen. Miss Griessen. A. Blackburn. J. Blackman. F. B. Grinham H. Maw.
A. B. Melles
(I. W.G.C. France) D. Bliss. (I. W.G.C., France). S. W. Braggins (Italy). F. C. Brinsley. T. W. Briscoe. G. R. Groves. W. & Mrs. Hales. W. Mort. C. Hanbury, M.P. (guest).
B. W. Harborne.
F. G. Harcourt. B. D. Burtt. G. H. Butcher. J. C. Nauen (Bermuda) A. & Mrs. Osborn. P. V. & Mrs. Osborne G. H. Cave. A. J. Cheek. (Dominica, B.W.I.). (India). P. W. Page. A. A. Pettigrew. W. W. Pettigrew. T. Člark. L. J. Harding. R. L. Harrow. Miss V. M. Harvey. T. E. Clarke. P. W. Conn. T. Hay (guest). E. Hewitson. F. G. & Mrs. Preston. C. P. Raffill. Miss G. Cope. H. Cossom. A. D. & Mrs. Cotton. F. G. Cousins. Miss Hill. J. Richardson. Sir A. W. Hill. R. D. Hogg. I. Robbie. J. Coutts. J. & Mrs. Robbie (Sudan). H. Holland. G. W. Robinson. E. Coward. W. & Mrs. Dallimore. J. H. & Mrs. Holland. F. M. Rogers Miss E. Dallimore. Miss Holland. (Tanganyika). W. Daniels. T. Sargeant. J. Holman. H. J. Davies, Jnr.H. J. Davies, Senr. J. A. N. Scott. F. S. Sillitoe. I. Sinclair. B. M. E. S. Hoogstad. E. G. Hooper. W. & Mrs. Howell. G. Dean. G. Dumke. C. E. Hubbard. Rev. W. C. Smith. E. G. & Mrs. Dunk. M. H. Dunk. J. D. Snowden. G. Hyland. J. R. Spray. F. J Stayner. C. & Mrs. Jones. Miss L. H. Joshua. H. W. Kemp. A. G. Kennelly. S. Edmondson. L. & Mrs. Stenning. C. R. & Mrs. Stock. J. W. England. F. H. Eul. F. P. Knight. A. J. Taylor. J. Ewart. Fisher. E. A. Lake. G. E. Taylor. H. Taylor. Folk. G. Lamb. W. & Mrs. Franklin. J. C. Taylor. W. Lamberton. J. R. Freeman. G. T. & Mrs. Lane. W. L. & Mrs. Lavender. G. F. Leith. G. C. Vanson. B. Gibbins. Terzo Viale. C. van Ginkel. Miss E. M. Wakefield.

F. G. Walsingham (Cuba).
W. C. Ward.
B. B. Wass.
G. Wassell.
Miss M. W. C. Watson.

D. V. Wells.
G. F. Wheeler.
A. C. Whipps.
E. V. Willoughby.
H. & Mrs. Williams.
R. F. Williams.

R. Vaughan-Williams.A. S. Wilson.A. E. Wiseman.G. E. Wolstenholme.Miss M. L. Yeo.W. H. Young.

THE CRICKET CLUB, 1934.

THE ANNUAL GENERAL MEETING of the Cricket Club was held in the Lecture Room on May 9th, 1934, when the following officers were elected:—Mr. L. Stenning, Captain; Mr. J. Glasheen, Vice-Captain; Mr. H. F. Davies, Hon. Secretary; and Messrs. C. F. Coates and H. Cossom, as members of the Committee.

A fixture list consisting of 22 matches was arranged, which included 2 mid-week and 4 evening games.

The season opened with a match against St. Lukes C.C. on Kew Green on May 12th. The game was very keenly contested and resulted in a win for our opponents by a very narrow margin.

This early reverse, however, did not damp our spirits, for it was followed by three consecutive victories against Hampton Council C.C., Wisley C.C., and Riverpark C.C.

The mid-week fixture that is essentially an annual affair and which never fails to attract all ranks in the Gardens, was Students versus Staff. This match was fought out on Kew Green on June 13th, in perfect weather and with the wicket in excellent condition. Mr. L. Stenning captained the Staff and Mr. J. Glasheen, the Students. The toss was won by the Staff who batted first.

The innings opened steadily and in a way that gave every hope of a useful first-wicket partnership. After some forceful batting the first wicket fell when the score had reached 61 runs. After this creditable score, wickets fell cheaply, until M. H. Dunk came in and stopped the rot and added a very useful 43 runs. The innings finally closed for the excellent total of 155 runs.

It was now the Students' turn to pass this score, and the condition of the wicket called for attack and forcefulness. This policy, however, was not carried out, and wickets fell all too cheaply, and with the score at 25 runs for 5 wickets, a definite turn for the better was apparent when J. Glasheen and D. Hogg put on 28 runs and brought the score up to 55. Still 100 runs behind, the remaining four batsmen then made an effort, but the bowlers were well on top and the innings closed with a victory for the Staff by 82 runs.

Owing to the absence of Sir Arthur and Miss Hill, the teams were entertained to tea on the Lawn Tennis Club's enclosure by Mr. J. S. L. Gilmour, whose kindness as host was much appreciated by all.

Our next match at Kew, which aroused a good deal of interest, was

against the Old Kewites and was played on June 23rd. We won the toss and batted first, but our opening was disastrous, losing 2 wickets for 4 runs. This early collapse was immediately checked by a sound partnership between J. Ewart and J. Glasheen who raised the score to 90 for 3 and so placed us in a more satisfactory position. After this, however, wickets again fell cheaply, due to the excellent attack by the Old Kewites—Messrs. B. W. Harborne, C. Jones and W. A. Hockley—and the innings closed at 128.

The Old Kewites, too, fared disastrously in their opening innings and 3 good wickets were down for 11 runs; but a good recovery followed, and when the score was raised to 125 for 9, the most exciting stage of the game was reached. Only 4 runs were needed for victory and one rather precarious wicket still to fall. In spite of a gallant effort by every member of our team, the necessary runs were made, victory being gained by the Old Kewites by 1 wicket.

During the tea interval many Old Kewites joined the teams, among them were Messrs. Christie, Coward, Maw and Sargeant.

On July 21st, another very good game was played against Sutton's C.C. on Kew Green. This was a Saturday fixture and attracted a considerable number of spectators. The teams were entertained to lunch and tea at the Rose & Crown. The Match was won by the visitors by 54 runs.

Our final match of the 1934 season, which we won, was played against St. Lukes C.C. in Richmond Park. This match will go down in the records of our Club to mark the occasion of a brilliant record individual score of 111 runs, made by J. Ewart. This score incidentally broke a long standing record of 86 runs, held by Mr. W. N. Winn, a former captain of the Club. His score was made on Kew Green.

Batting honours went to:

- J. Ewart, 111 against St. Luke's C.C. and 63 against H.M.O.W. (Kew) C.C.
- J. Glasheen, 79 against H.M.O.W. (Kew) C.C.
- C. F. Coates, 47 against Wisley C.C.
- E. Sleigh, 45 against Hampton C.C.

Bowling honours went to:

- M. H. Dunk, 6 for 12 against Wisley C.C.
- J. Glasheen, 5 for 16 against H.M.O.W. (Kew) C.C.
- P. W. Page, 5 for 15 against Riverpark C.C.
- A. R. T. Buckley, 4 for 7 against H.M.O.W. (Kew) C.C.

It was unfortunate that, for many reasons, 7 fixtures had to be scratched, and adverse weather conditions caused one match to be abandoned. Of the remainder 7 were won, 6 lost, and 1 drawn.

The Committee desire to take this opportunity of expressing their appreciation of the continued improvement in the support that has been extended to the Club during the past season, and express the

hope that 1935 will be as successful and that the fixtures will prove as interesting and enjoyable.

H. F. Davies, Hon. Secretary, 1934.

THE FOOTBALL CLUB, 1934.

At the Annual General Meeting of the Sports Club on May 9th, 1934, the following members were elected to hold office for the season 1934-35, Mr. P. W. Page, Captain; Mr. T. R. Clark, Vice-Captain; Mr. B. B. Wass, Hon. Secretary; and Messrs. P. Batchelor and G. Wassell as members of the Committee.

The local Cup competitions again attracted the attention of the Club, and entries were accepted for participation in the Richmond and District, and Twickenham and District Charity Cup competitions.

After a lapse of several years, a match was arranged with our old friends, Messrs. Sutton and Sons F.C. (Reading). On September 29th, 1934, we travelled to Reading to play our second match of the season. This was a very sporting and most enjoyable game and our opponents proved themselves the better team by defeating us by 2 goals to 1. After the match our team and supporters were entertained to refreshments by our opponents, and before leaving for Kew, our captain expressed our appreciation to Messrs. Sutton & Sons F.C. for the enjoyable afternoon and reminded them that we should expect to reverse the result when the return match was fought out on our ground.

Our first cup-tie was played on our ground at Richmond when our opponents were the West Borough Sports Club. Our hopes of entering the next round of the competition were not realised, and we had to admit defeat by 3 goals to nil.

On October 27th, 1934, we paid our annual visit to Wisley, where we expected to encounter a keen opposition. We were well supported on the touch line, but Wisley's defenders were in good form and we lost this match by 3 goals to 1.

The first win of the season was gained at the expense of the Wandsworth Parochial F.C. The game was not a very exciting fixture, and the weather conditions were extremely unpleasant, however, a 2—0 victory gave us encouragement, and the following week we were successful against the Old Cambrians' F.C. by 3 goals to 1.

Three other matches which had been arranged, had unfortunately to be cancelled. At the time of writing we are looking forward to the remaining fixtures, which we hope will be sportingly fought out, with good weather conditions.

B. B. Wass, Hon. Secretary, 1934-35.

THE SOCIAL CLUB.

The Social Club was formed in January, 1934, with the object of providing indoor entertainment during the winter months. The control of the Club was vested in a Committee of five, and meetings were held in the Iron Room, on Mondays and Fridays. Such games as table-tennis, darts, draughts and cards were provided and often keen contests resulted.

During the first season the Club proved to be a great success among the Sub-foremen and Students, and a large membership resulted. In consequence it was possible to arrange inter-club fixtures, with the Constable's Section, H.M. Office of Works, and the Kew Men's Social Club, and many enjoyable evenings were spent.

The 1934-35 season opened with an Annual General Meeting on October 1st, 1934, when the following officers were elected:—Mr. J. S. L. Gilmour, President; Messrs. H. J. Davies, Chairman; R. Dean, Hon. Treasurer; P. W. Page, Hon. Secretary; and G. R. Groves and J. Ewart, as Members of Committee. It is with regret that it has to be reported that interest in the Club has fallen off considerably, and owing to poor support, no inter-club fixtures have been possible. Advantage is taken of these lines to ask that all Students will give the Club their support and enable the Committee to fulfil the programme they had originally embarked upon.

P. W. PAGE,

Hon. Secretary, January, 1935.

SWIMMING CLUB, 1934.

At the Annual General Meeting of the Sports Club held on May 9th, 1934, the following were elected as Officers of the Club, Messrs. J. Ewart, Captain; W. Everett, Vice-Captain; G. J. Leith, Hon. Secretary; A. J. Taylor and B. B. Wass, members of the Committee.

Richmond Baths were well patronised by members on opening for the summer season and advantage was taken of the reduced rate for tuition to members of recognised Clubs, by the Baths Instructor. Under his guidance about half-a-dozen members became proficient.

It is to be regretted that owing to the severe drought and the consequent state of the River Thames, which became almost brackish, and each tide brought with it rubbish to such an extent as to make swimming an impossibility, it was not found practicable to hold the annual mile championship race. Originally fixed for a date in July, it was subsequently postponed until August 14th, in the hope that the rains which were so badly needed, would cleanse the tideway, and finally abandoned in so far as 1934 was concerned.

The Club officials did their utmost to keep a lively interest in the sport by arranging swimming practices in the comparatively clean water above Teddington Lock and the first excursion was attended by a dozen members, but interest waned to such an extent that eventually only two or three participated in them.

During the period in which hopes ran high that our annual race would be held, an attempt was made to find a suitable course above the Richmond Lock, from Messum's Boathouse up the stream, but only three showed any interest and this venture was ultimately abandoned.

Following such a very successful season in 1933, the 1934 one can scarcely be one worthy of even passing reference, but the dry, almost rainless summer, following yet another year of drought, made "Old Father Thames" anything but an ideal place for aquatic sport. A year robbed of its principal event (a championship race), can only leave with us the hope that the 1935 season may be a very much more successful and congenial one.

G. J. LEITH, December, 1934.

THE BRITISH BOTANY CLUB, 1934.

The Annual General Meeting was held in the Lecture Room on March 8th, 1934. Mr. J. S. L. Gilmour presided over a large attendance of past and prospective members. Mr. E. Nelmes was elected President; Mr. J. C. Taylor, Hon. Secretary; and Messrs. A. S. Elson and W. S. Everett were appointed to serve on the Committee.

Specimens from the collections of Messrs. Elson, Everett and Taylor were exhibited for the guidance of intending collectors, while Mr. Gilmour gave valuable advice on collecting, drying and mounting and spoke on the relative merits of the "Floras" in general use.

It was very gratifying to note the increase in the number of collectors being maintained throughout the year, and the following members handed in collections for examination:—Messrs. G. Dean, J. Ewart, G. W. Freeman, J. Heppell, D. Hogg, G. Hyland, J. Leith, J. Offley, P. W. Page, I. Robbie, B. B. Wass and D. V. Wells.

The usual Saturday afternoon and evening trips were held, and all were well attended by members and friends. The annual trip to the salt marshes and shingle beach at Milford-on-Sea proved very successful and enjoyable.

Except for a period in the early part of the year, the hot, dry summer proved ideal for collecting and the preparation of specimens and few were spoilt by damping.

The opening trip had to be postponed on three occasions owing to inclement weather, but we eventually made a start on Saturday afternoon, April 22nd, when a small party paid a visit to the Chessington district and collected *Cerastium arvense* and *Ranunculus Ficaria* var. plena, which abound in this locality.

As in the previous year the evening excursions to Teddington Sand Pits, along the Thames and the Brent Canal were conducted by Mr. G. W. Robinson, while the annual visit to the Queen's Cottage Grounds was under the guidance of Mr. C. E. Hubbard. These trips were all well attended and a large amount of material was collected.

Once again we were favoured with excellent weather for the annual visit to Milford-on-Sea, Hampshire, on July 3rd. Dr. W. B. Turrill led a party numbering about thirty, including several members of the Herbarium staff, to whom our thanks are due for assisting us in identifying the material collected. Lunch was followed by a refreshing bathe, and on our way back to Milford we were fortunate enough to be conducted over the historic Hurst Castle. Plants of interest collected on this trip were Aster Tripolium, Glaucium flavum, Spartina Townsendii, Beta maritima, Geranium purpureum, and Allium vineale var. compactum.

Box Hill, Headley Heath, Epsom, Mickleham Downs and Leatherhead, were visited in turn and many plants typical of the heath lands and chalk downs were secured. A dense Beech wood near Headley yielded the interesting saprophytic plant, Monotropa Hypopitys.

On August 27th, Mr. Robinson conducted an evening excursion to Staines Common for the purpose of collecting aquatic flora from the ponds there and in spite of the drought a large and interesting number of specimens were secured. No little amusement was caused by the two members who divested themselves of their clothing and swam for Nymphaea alba, one of them bringing back flowers in his teeth! Other plants collected were Charophyta vulgaris, Hottonia palustris, Sparganium simplex, Sparganium ramosum, and Ceratophyllum demersum.

All the twelve collections submitted were passed as satisfactory. It was decided that owing to the excellence of the collections of Messrs. G. W. Freeman and J. Offley, the Dümmer Memorial Prize should be awarded to both collectors, and that distinctions be awarded to Messrs. P. W. Page and B. B. Wass.

A word of thanks, in conclusion, must be expressed to Messrs. J. S. L. Gilmour, G. W. Robinson, E. Nelmes, C. E. Hubbard and Dr. W. B. Turrill, for the help and advice they have so ungrudgingly given the members during the 1934 season.

J. C. TAYLOR, Hon. Secretary, 1934.

MUTUAL IMPROVEMENT SOCIETY, 1933-34.

The Annual General Meeting was held in the Garden Library on September 25th, 1933, when Mr. C. P. Raffill was in the Chair, supported by 38 members. The principal business was the election of officers for the session. Mr. C. P. Raffill was re-elected Chairman, and Mr. G. W. Robinson, as Vice-Chairman; Mr. A. J. Taylor, Hon. Secretary; Mr. J. C. G. Mackenzie, Assistant Hon. Secretary; while Messrs. J. C. Taylor, T. R. Clark and M. Stanley were elected members of the Committee.

Twenty-two lectures were arranged, eighteen of which were contributed by the members.

Mr. W. Dallimore opened the session with a very interesting lecture on "Trees and the Countryside," illustrated by an excellent series of lantern slides. We are indebted to the Director for the concluding lecture of the syllabus concerning the germination of seeds, under the intriguing title "The Evasion of Death Duties, or the Grave-digger Outwitted."

A glance at the syllabus will show the wide range of subjects which were dealt with, and there is no doubt that this Society affords an excellent opportunity for the improvement of one's knowledge of allround horticultural subjects, often providing the initial experience of public lecturing, so helpful in after years when taking up public appointments.

The average attendance was 36, while 45 individual members took part in the discussions.

The Hooker Prize was awarded on the unanimous vote of the members to Mr. A. J. Taylor and the Society's Prize to Mr. T. R. Clark.

During the summer months, trips were arranged and well-attended to the following establishments of horticultural interest:—"Brockhurst," East Grinstead (the residence of F. J. Hanbury, Esq.), Knap Hill Nurseries, and to Messrs. Dobbie's Seed Farms at Marks Tey, Essex. It is pleasing to record that Mr. C. P. Raffill and Mr. G. W. Robinson associated themselves on every possible occasion with the members of the Society during the session, and our thanks are due to them for their valuable help and interest.

SYLLABUS, 1933-34.

Date.	Subject.	Lecturer.
1933.		
Oct. 9th.	*Trees and the Countryside.	Mr. W. Dallimore.
,, 16th.	Strawberries.	J. E. May.
,, 23rd.	Questions with Answers.	
,, 30th.	Orchids from the Greenhouse.	C. B. Gibbins.
Nov. 6th.	Commercial Bulb Forcing.	R. V. Williams.

Nov. 13th. ,, 20th. ,, 27th. Dec. 4th. ,, 11th. ,, 18th. ,, 25th.	Public Gardening in Industrial Towns with comparisons. Bowling Greens, their constructions and upkeep. Hardy Primulas. *South African Wild Flowers. Garden Design. Christmas Vacation.	T. R. Clark. P. L. Bachelor. P. W. Page. P. J. Stayner. J. A. Blackman.
1001		
1934.	in the first of	
Jan. lst.	((Ed., 4), II., 4 C., 22	- I-
,, 8th.	"Edward's Head Gardener"	
	(With apologies to P. G.	4 C El
	Wodehouse).	A. S. Elson.
,, 15th.	Cut Flowers for Market.	R. Spray.
,, 22nd.	*Berlin Botanic Gardens.	W. Leps.
,, 29th.	The Kitchen Garden.	G. G. Elphick.
Feb. 5th.	Trees and Shrubs.	J. C. Taylor.
,, 12th.	Dahlias.	H. Cossom.
,, 19th.	Nursery Work in Versailles.	P. M. Lecointe.
,, 26th.	Horticulture in Cornwall.	E. G. Hooper.
Mar. 5th.	Propagation and Cultivation of	· ·
	Cacti.	Mr. L. Stenning.
,, 12th.	Hardy Ericaceous Plants.	R. F. Miles.
,, 19th.	*Gardening in Chile.	Mr. G. W. Robinson.
,, 26th.	The Evasion of Death Duties	
,	or The Gravedigger outwitted.	Sir A. W. Hill.
April 9th.	Annual Report.	
,	-	
	*Lantern Lectures.	

A. J. Taylor, Hon. Secretary. J. G. C. Mackenzie, Asst. Hon. Secretary. 1933-1934.

THE LECTURES, 1934.

General Botany.—Lecturer, Mr. V. S. Summerhayes. Distinction:—G. J. Leith.

Plant Nomenclature.—Lecturer, Miss M. L. Green. Distinctions:—J. R. Spray, A. J. Taylor and J. C. Taylor.

Soils and Manures.—Lecturer, Dr. H. L. Richardson. Distinction:—J. R. Spray.

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

Distinctions:—J. R. Spray, A. J. Taylor and J. C. Taylor.

- Elementary Systematic Botany.—Lecturer, Miss M. L. Green. Distinctions:—H. F. Davies, G. A. Hyland and A. W. J. Ivey.
- Plant Physiology and Ecology.—Lecturer, Dr. W. B. Turrill. Distinctions:—H. F. Davies, and G. A. Hyland.
- Advanced Systematic Botany.—Lecturer, Dr. T. A. Sprague.

 Distinctions:—T. R. Clark, F. H. Eul, R. D. Hogg and J. R. Spray.
- Physics and Chemistry.—Lecturer, Dr. P. Haas.

 Distinctions:—G. W. Freeman, G. Heppell and J. Lewis.
- Plant Pathology (Fungi).—Lecturer, Mr. A. D. Cotton. Distinctions:—W. J. Corkhill, J. W. Ewart and R. D. Hogg.
- British Botany.—(Under the supervision of Mr. E. Nelmes).

 Dümmer Memorial Prize:—G. W. Freeman and J. Offley.

 Distinctions:—P. W. Page and B. B. Wass.

NOTES AND GLEANINGS.

VISITORS TO THE ROYAL BOTANIC GARDENS DURING 1934.—1,170,369 persons were admitted to the Gardens, a decrease of 55,688 compared with 1933. The total Sunday attendance was 521,786 and on weekdays (other than Students' Days) 552,583, while on Students' Days 96,000 visitors were admitted, making a total weekday attendance of 648,583.

The greatest monthly attendance was in May, with 329,477 and the lowest in December, with 7,545 visitors. The highest daily attendance was 73,644 on May 21st (Whit-Monday), the lowest was 6 on January 9th; the largest number recorded on a Sunday during the year was 44,678 (on May 13th) while the lowest was 267 (on December 2nd).

Educational visits by organised parties of school children were very numerous and trips were made to the Gardens from South Wales, Devon, Cornwall, Somerset and Northamptonshire, to mention only a few localities.

The monthly attendance figures throughout the year and a comparison with 1933 may be of interest:—

				1934.	1933.
January				12,644	11,720
February				17,083	19,481
March				67,731	102,744
April		18 M N		170,068	253,826
May			<i>.</i>	329,477	206,615
June		ever a		154,293	195,390

				1934.	1933.
July	* * * * *		Tella e	126,359	126,420
August		10 K K		147,875	162,007
September		1919-1		97,182	90,805
October	* * *	1919-1		30,973	36,665
November				9,139	13,294
December			• • •	7,545	7,090
		Total		1,170,369	1,226,057

The summer of 1934 will be remembered on account of prolonged spells of dry weather. In consequence the lawns suffered considerably, though the welcome rains and almost complete absence of spells of frosty conditions during the closing weeks of the year have brought about a remarkable return to their notable green and fresh appearance. Severe storms were noticeably few and little or no damage to trees has to be mentioned.

The total consumption of Thames-water for watering, etc., during the past year was 31,731,000 gallons.

In 1934, 1,073 separate consignments of living plants, bulbs, seeds, etc., were received as additions to the Kew collections. This number represents a slight decrease on the previous year, but is still well above the average.

The annual distribution of seeds resulted in 6,027 packets of herbaceous and 3,936 packets of trees and shrubs being sent out.

In our 1934 number it was incorrectly reported that Mr. A. D. Cotton had been awarded the M.B.E. on the occasion of the 1934 Birthday Honours, this should have been to the effect that he had been made an Officer, and not a Member of the Most Excellent Order of the British Empire (O.B.E.).

The Taylor Memorial Fund.

A further donation of 10/- received from Mr. G. Coombes (U.S.A.), is the only amount received since the publication of the list of donors in the 1934 *Journal*. The fund will definitely be closed when the financial statements are prepared at the end of April next.

Mons. Auguste Menissier (of Vilmorin—Andrieux et Cie., Verrières le Buisson, Seine-et-Oise, France), has lately been awarded the distinction of Commander in the Order of Merite Agricole. We extend to Mons. Menissier (who left Kew in December, 1899), our congratulations on this well-merited honour.

Kewites will learn with much pleasure that an Honorary Degree of LL.D. was conferred on Mr. John Hutchinson (a member of the Kew Herbarium Staff), on the occasion of the installation of General Smuts, as Rector of the University of St. Andrew's, on October 16th, 1934.

Yet another well-known member of the Kew Staff has retired from the Public Service under the regulations governing the age limit. Mr. John H. Holland retired from the post of Assistant in the Museums Department on October 17th, 1934, bringing to a close forty years' connection with Kew.

Mr. Holland entered Kew as a student gardener on October 8th, 1894. In June, 1896, he was appointed Assistant Curator of the Botanic Station, Old Calabar, Nigeria, and a year later he was promoted to Curator. Mr. Holland returned to Kew as Assistant (later Botanist) in the Museums on the retirement of Mr. J. R. Jackson in October, 1901. Mr. and Mrs. Holland have regularly attended the Kew Guild Annual General Meetings and the Annual Dinners for many years, and Kewites will wish them many happy years, though we are assured that Mr. Holland still intends to continue his work in connection with economic botany.

Dr. Ronald Melville of the Institute of Plant Physiology, Imperial College of Science and Technology, has been appointed as Botanist in the Museums in succession to Mr. Holland.

Kew Observatory was the sunniest station in the so-called London area during 1934. Kew's total sunshine was 1,572.5 hours, against 1,508.9 hours recorded at Hampstead, while South Kensington had 1,422.4 hours.

The passing of " Joey."

"Joey" (a Stanley Crane) has been the centre of attraction to the many who have frequented the Gardens for nearly twenty years, but this summer alas! he will be seen no longer strutting haughtily around the Refreshment Kiosk. He was found drowned in the Lake on the morning of January 31st, 1935. It is presumed that in crossing from the island to the main lakeside he fell through the thin ice and was unable to free himself and was consequently frozen in.

He had been called the "G.O.M." of the Gardens, and had been photographed for the Press on scores of occasions, while on the day of his death the news placards of a leading London newspaper bore the legend "Joey of Kew dead."

"Joey" has had an eventful life. Once he lost a toe through stepping into the rotating cutters of the motor mower. He figured too, in a love affair, and drove away the mate of a dainty Demoiselle Crane and tried in vain to take his place in the little lady's affections. He had his friends too among the feathered community of the Gardens and acted as guardian to the storks who were being terrorised on one occasion by geese. "Joey" had his peculiarities, and it was not everyone who could approach him with impunity. He was doubtless one of the oldest of his kind in this country.

John Gregory.

Our members will be interested to learn that on the occasion of his 94th birthday, a few friends at Kew sent a little present in the shape of a woollen muffler, to Mr. John Gregory. Mr. A. C. Whipps and his wife call regularly to see our old friend who still is very cheerful and sometimes takes advantage of a fine day to go out for a walk. Very occasionally he ventures as far as the R.H.S. Hall for a fortnightly show and his interest in plants and flowers is still remarkable.

The Guild has been able, by means of the weekly grant from the Benevolent Fund, to add considerably to the comfort of our oldest member, and his gratitude is more than can be expressed by mere words.

The Council of the Royal Horticultural Society has conferred the Victoria Medal of Honour in Horticulture on the Director, Sir Arthur Hill, K.C.M.G., Sc.D., F.R.S., etc., and Mr. William Hales, A.L.S., Curator of the Chelsea Physic Garden, and President of the Kew Guild for 1934-35.

The Associateship of Honour has been conferred upon Mr. S. W. McLeod Braggins, Superintendent of the La Mortola Gardens, Ventimiglia, Italy, and Mr. C. P. Raffill, who as Assistant Curator of the Temperate Department at Kew is familiar to all Kewites.

We extend our congratulations to these Kewites on the recognition of their services to horticulture by the Royal Horticultural Society.

We are pleased to record that Mr. John Coutts, the popular Curator of the Gardens, has been elected an Honorary Member of the New Zealand Institute of Horticulture.

糖素

KEW METEOROLOGICAL NOTES, 1934.

1934.		Rainfall	Temperature		
		in Inches.	Maximum	Minimum (on grass).	
January		1.24	55°	19°	
February		.23	56°	19°	
March		2.13	60°	23°	
April		1.47	77°	28°	
May		.44	84°	29°	
June		1.23	92°	38°	
July		1.49	87°	43°	
August		1.82	83°	39°	
September		1.03	84°	37°	
October		.91	69°	26°	
November		1.56	59°	22°	
December		4.70	57°	27°	
Total Rainfall		18.25			

WEDDING BELLS.

Mr. A. W. C. Anderson to Miss Prudence Collier at St. Paul's Anglican Cathedral, Dunedin, New Zealand. June, 1932.

Mr. W. E. Trevithick to Miss Bessie Vellam at Beccles, Suffolk, on October 7th, 1933.

Mr. C. J. Agate to Miss Dagmar Nelson at Long Island, N.Y., U.S.A., on April 27th, 1934.

Mr. Ernest W. B. Gale to Miss Mabel A. F. Snell at Christ Church, Richmond, Surrey, on June 2nd, 1934.

Mr. John Birkentall to Miss Anna Elizabeth O'Neill at Richmond Hill, N.Y., U.S.A., on November 28th, 1934.

Dr. Ronald Melville to Miss Elsie F. Sharpington at Roupel Park Church, West Norwood, on January 7th, 1935.

Mr. John S. L. Gilmour to Miss Molly Berkley at Dormington Church, Hereford, on April 30th, 1935.

We understand that Mr. A. Findlay Gunn, now of Randfontein, South Africa, and Mr. J. R. Spray of Southend Parks Department, have also joined the "Benedicts," but fuller details are not to hand.

KEWITES AS AUTHORS.

Practical Gardening in New Zealand.

Mr. D. Tannock (Superintendent of Gardens, Reserves and Plantations, Dunedin), assisted by Mr. M. J. Barnett (Superintendent of Parks and Reserves, Christchurch), Mr. A. C. Pye (Auckland), and others concerned are to be congratulated on the publication of "Practical Gardening in New Zealand," to take the place of "The Manual of Gardening in New Zealand." The book has been thoroughly revised and brought quite up-to-date in every branch of gardening, and is more especially written to suit New Zealand conditions from the North Cape to the Bluff.

It is well-printed and illustrated, has more than one hundred useful diagrams incorporated in the text, and has 309 pages of text (including index).

Chapters are devoted in particular to the garden in the making, the flower garden, trees and shrubs, bamboos, climbing and native plants, soils, the heated greenhouse, vegetable culture, the fruit garden, garden pests, etc. An extremely useful chapter is devoted to formulas for insecticides and fungicides.

Calendars of gardening operations are given and the North and South Island are treated separately.

Appendices to the volume deal with fertilisers and manures, as well as control of pests and diseases by spraying. An alphabetical list of popular and botanical names of plants in general, as well as trees, shrubs and native New Zealand plants, adds much to the value of the work.

New Zealand Press reports of the volume are very appreciative in their reviews and all refer to the practical value of it.

Mr. Tannock's concluding remarks in the brief preface are, "It is said that gardening is the purest of human pleasures and the greatest refreshment to the spirit of man. It is hoped that this book will add to the pleasure and profit of many gardeners, both amateur and professional, and be a real help to those who pursue horticulture either as an agreeable hobby or as a means of livelihood."

The book is published by Messrs. Whitcombe and Tombs, Ltd., of Auckland, Christchurch, Dunedin, Wellington, New Zealand, Melbourne, Sydney and London.

E. G. D.

STRUCTURAL AND OTHER CHANGES AT KEW.

H.M. Office of Works have been responsible for many new constructional works in the Gardens during the past two years. It may be of interest to mention the principal undertakings, as they will be seen to cover a very wide range, from drainage works to new greenhouses, and from workmen's messrooms to an artist's studio.

A marked improvement is now noticeable in the Rhododendron Dell during spells of wet weather, for new drainage works have been completed throughout this attractive part of the Gardens and flooding no longer occurs. Improvements to the drainage system have also been effected in many other parts of the Gardens.

In the Arboretum Nursery the demolition of certain cold frames has provided the opportunity for the construction of a new span-roof propagating pit, while in the Temperate House Pits, additional accommodation has been found for new cold frames, and the ventilator system of the Rhododendron house (No. 26A) has been given attention.

The arrangements for the supply of Thames Water through the mains of the Richmond Borough Council, no longer called for the use of the old, but familiar, Pumping Station, adjacent to the Stables, so the pumping plant has been removed and the building converted into a garage and workshop for the Garden's motor lorry, complete with the very necessary inspection pit and workshop. Similarly the original boiler house is now a roomy cart shed.

Among several schemes that have long been under consideration, the alteration of the long, straight Vine pergola, so as to form a square surrounding the refreshment kiosk was undertaken quite recently. It will serve, when the vines are fully developed, as a very useful screen to partially hide the plain building. The Pergola is constructed of barrel-iron and is twelve feet in width. While many of the best of the old plants have been transferred to the new site, new and younger ones have been planted from the Arboretum nursery.

A long-felt need has been met by the erection of a new lavatory for gentlemen near the Ruined Arch (on the site of the old lavatory). This is provided with washing facilities, which will prove a boon during the summer months, and its usefulness will be enhanced by its proximity to the Refreshment Kiosk, which has no such accommodation.

Much has been done to improve the heating system in the Temperate and Palm Houses and the Tropical and Decorative Departments. Old boilers have been replaced by new ones of modern type and considerable lengths of new hot-water pipes have been laid down.

During the past year, the Flagstaff was scraped and redressed with a bituminous perservative. The contractors responsible for this undertaking dispensed with the cradle system formerly employed and the flagstaff was "laddered" throughout its entire length by means of sectional socketted ladders, such as are employed by steeplejacks in repairing and renovating chimney stacks or church spires.

In several of the larger propagating, as well as show houses the old benches of wrought iron and slate have been cleared away and reconstructed on quite a new method. Ferro-concrete has been substituted and one of the worst enemies in glass-house constructions, namely, rust and fungus growths will no longer have to be reckoned with. In the reconstructions of staging *Thuja plicata* has been used exclusively, and steel or iron nails and screws have been dispensed with, being replaced by copper and brass. Roof sashes have been renewed in many of the houses, resulting in improved ventilation being possible at all time.

Two new pits, each 130 feet in length have been constructed in the Melon Yard, these two are built entirely of *Thuja plicata*, while giving the maximum amount of light with perfect safety.

In the Herbaceous Department the cold frames have been rendered out to minimise the spread of the weevils which infested them formerly, while the gearing of the ventilators in the pits has had attention, and additional shading provided.

The Assistant Curators' Offices too, have received attention in the matter of redecoration, ventilation, etc., while the range of potting sheds in the Office Yard have been re-roofed and all woodwork renewed in the process.

A new wing has been added to the Jodrell Laboratory and at the same time the balanced lay-out of this building has been greatly improved. The addition incorporates a fully equipped studio and a dark room. The old portion of the laboratory has been decorated throughout, while the Curators' Offices and the Garden Library have received similar treatment.

The workmen's messrooms have received careful attention during the last few months, glazed ventilators have been fitted into the roofs, adding considerably to the brightness which the redecoration of the interiors has brought about. The old solid wooden benches which have done their duty well for many years, have been replaced by white enamel-topped tables, cupboards have been provided for the utensils, in place of the old open dresser, and in the Office Yard messroom, the cumbersome closed range has given place to a gas cooker of sufficient size to cater for the many who make use of the facilities provided.

In the Ferneries many improvements have been carried out, and frames of non-rusting metal have been provided for holding peat to the walls, in order that ferns may be planted therein.

It would be difficult indeed to detail all that has been effected during the past months, but before bringing these notes to a close, it will be necessary to comment on the improvements to the Aquatic Garden (near Museum II). The centre pond has been deepened and now has a maximum depth of nearly 4 feet, while the unsightly cement stucco work has been removed and replaced by staggered brickwork, giving a very pleasing effect. The surrounding tarred path has been replaced by York stone paving.

E. J. A. and E. G. D.

A KEWITE IN AUSTRALIA.

Mr. William Leslie writes from 92, Stephen Street, Toowoomba, Queensland:-" I have just had one of my annual treats-reading the Journal of the Kew Guild. I read of Arthur Osborn being our President for the year 1933-34 and of the Guild's annual dinner and those who were present, and scanned the annual report and the accounts. The Syllabus of lectures is much more comprehensive than it was in my time at Kew. My 35 years experience in the Colonies since leaving Kew in January, 1899, encourages me to emphasise the importance of such subjects as Soils and Manures, Plant Pathology (Insect Pests and Fungus Diseases), and Plant Physiology. The activities of the Mutual Improvement Society, the British Botany Club and the social side of life at Kew, together with Notes and Gleanings were read with great interest. Mr. R. A. Paton's article on "Logging in Nigeria," and Mr. J. D. Snowden's account of his trip from Ankole to Juba were of particular interest to me as I had seen something of logging at Axim and in the hinterland of the Gold Coast Colony, and had also spent a considerable time in Lagos and Calabar in Southern Nigeria. Mr. Snowden's account of his car becoming bogged caused me to exclaim 'Well, well! Kewites in other parts of the world can get bogged as well as I can on the Darling Downs of Queensland.'

- "It is surely well-known that the Darling Downs possess the richest soil in the world. They cover an area of about 3,600 square miles and consist mostly of black soil flats. The average annual rainfall is approximately 30 inches, and the shade temperature ranges from 25° minimum to 95° or 100° in summer. The elevation is from 1,800 to over 2,000 feet above sea level. In this district there are hundreds of farms growing principally wheat and other cereals, and dairy farming too, is a staple industry. Many of the oldest established farms have been producing two crops per annum, generally wheat in winter and maize in summer for the past 40 years, and not a trace of manure or fertiliser is employed, nor is it necessary, so rich is the land. On some of the more modern farmsteads a little manuring is now being done and crop rotation practised.
- "The reference in Mr. Snowden's article to the bogging of his car, suggested these lines on my own locality, as on one occasion during a particularly wet spell, I had a similar experience and even with chains on the wheels of my car, I was only just able to reach a friendly farmer's shack. The roads were thick with black mud and my car had to remain in the shed for almost two weeks before the roads were again fit for traffic. Here it is not a question of "shooting" through mud pools but of traversing many miles of the soft, black ooze, during wet spells. Our roads, however, are being improved by leaps and bounds, and there are many miles of good concrete roads in many parts.
- "As I read on through the Journal I came upon the In Memoriam notes and learned that some co-workers of mine at Kew had joined the Great Majority—Mr. W. Irving, Dr. Scott, Max Morgenroth and

Emil Mische—all of whom I remembered with much respect and regret at their passing. I was sorry indeed to find there were not more notes from other Kewites, to add interest to what has always proved to be a publication to be looked forward to. Cannot Kewites generally be induced to support their *Journal* by contributing a few lines of general interest and thus strengthen the ties that bind Kewites together through its medium? I too thought this over, and as a few years have passed since I last wrote, I decided that perhaps a few lines from me might be of interest.

- Eldande

Of the trees that thrive here, the Camphor Laurel (Cinnamomum Camphora), does extremely well at Toowoomba in the red volcanic soil, but out on the Downs the black soil does not suit its growth. A common shade tree on the farmsteads in Southern Queensland is the Perrerina (Schinus molle). It is graceful in habit, hardy and resists our periodic droughts. Pines do well on the ranges especially Pinus insignis. Deodars are a common sight in gardens. In my own garden I have planted Pinus insignis as a wind-break on the west, while other trees include Auracaria Cunninghami, Cocos plumosa and Washingtonia filifera. Fruit trees do extremely well, and there are peaches, apricots, plums, apples, persimmons, oranges, mandarins, lemons, avocadoes and walnuts, while Passiflora edulis produces heavy crops and is a favourite fruit for fruit salads.

- "Common fruits which can be bought quite cheaply in the local market are custard apples and papaws, both from the coastal districts. These are not happy here at an elevation of 2,000 feet. The variety of Custard apple most often seen and certainly the best is called "Mammoth." We have many varieties too of Anona cherimoyer but the "Mammoth" appears very near to Anona diversifolia, and was obtained from British Guiana about 30 years ago. Fruits have been known to weigh as much as 5 lbs. 11 ozs. each. This favourite variety has an agreeable melting flesh of a delicious sub-acid flavour and is almost seedless. There is a marked range in shape and size of the fruits even on the same branch of individual trees.
- "Of Pineapples, the varieties "Smooth Cayenne" and "Ripley Queen" are commonly grown on the coast, prices for good quality fruits ranging from 3/- to 6/- per dozen retail.
- "We are now experimenting with varieties of Dates in Western Queensland where the rainfall is from 15 to 20 inches annually, but the suckers are very difficult to establish. Dates seem to thrive best with their roots in the sub-artesian bore water or in the bore drains. Efforts are also being made to grow olives.
- "Labour is our chief difficulty, and as with many industries, the lighter labour, which is performed by women and children, is our chief problem. The basic wage for an ordinary worker in this locality is £3 14s. 0d. for a week of 48 hours.
- "The greatest pest in the fruit farming areas is the fruit fly. Beautiful peaches can be grown easily, but to keep them free from grubs is a very serious problem. Thousands are caught by luring them into already infested fruit, but they breed in the scrub and bush

areas and invade the cultivated orchards every season to the dispair of the grower. What is required is an effective natural enemy, and when this can be found, a great service will be done as was carried out when the insect parasite was introduced that so effectively combatted the prickly pear (Opuntia inermis). Where, 10 years ago, millions of acres were quite useless owing to the growth of the prickly pear, it has now all rotted down after being riddled by the larvae of the Cactoblastus, and what could probably never have been accomplished by man's ingenuity, has been possible by the introduction of this insect enemy in a few years."

NOTES FROM ST. HELENA.

When one gets a first close-up view of this small Island in the Atlantic, from the deck of a ship anchored off Jamestown, the experience is one of slight depression. The brown and grey hills, parched and barren, tower above one's head, so that the vessel, which seemed so large and fine in the Thames, shrinks to lilliputian dimensions. Because of the soft, crumbling appearance of the rocks, that fleeting impression of respect and awe usually called forth by the grandeur of rugged, mountainous country, is completely absent, but one is rather saddened by the suggestion of rapid decay and impermanence.

Jamestown, as seen from the ship, appears as a jumbled line of buildings strung along the lower end of a tremendous ravine. On either side the land rises steeply to form two gigantic ridges. From grey stone fortifications perched on the nearest ends of these ridges, protrude the dark, sinister-looking muzzles of guns which seem to overhang the sea, hundreds of feet below. In such manner does St. Helena seem to greet the newcomer, and so must the Emperor Napoleon have felt when he too first sighted the Island, realising also that this was the end of all his dreams and aspirations. To think his spirit still hovers round the Island, warning and even repelling travellers, requires no vivid imagination. Fortunately, St. Helena and its people have a kindlier heart than the aspect on approaching its coast leads one to expect.

After rising steeply (one always does that, or the reverse, for there is no middle course!), the visitor passes through the barren coastal belt which extends for a mile inland around the whole Island. In this area, the Prickly Pear, a species of Agave and stunted Mauritius Hemp (Furcraea gigantea) predominate, relieved here and there with the different green of the foliage and yellow flowers of Tecoma stans, or the scarlet flowers of an occasional Pelargonium. The latter plants, natives of South Africa, as well as others, have long since become naturalised. The parched appearance of the coastal belt gradually gives way to the richer greens of slopes covered with pastures, trees and fields of New Zealand Flax (Phormium tenax), and Diana's Peak, the highest point in the Island (2,700 ft. above the sea), comes into view, rendered the more conspicuous by a solitary tree of Arau-

caria excelsa which grows on its summit. This peak is the highest point of a semi-circular ridge, known as the Central Ridge, and saves St. Helena from complete barrenness by causing the precipitation of rain. The extreme ends of the ridge, about three miles apart, are cut abruptly at the coast on the south of the Island, so that this part of St. Helena is like half a gigantic pudding basin cut through vertically. This ridge is spoken of as representing half the rim or crater of an ancient volcano, the remainder having been blown into the sea. To stand on any part of the ridge and to look down to the hollow below, with the white surf breaking along its lowest edge, provides a view of such grandeur that is impossible to forget.

It is only on the Central Ridge and the precipitous cliffs around the coast, that the remains of St. Helena's idigenous flora now exists. The flora of the cliff is of a zerophytic type and includes a Frankenia, a species of Mesembryanthemum, Aster rugosum (a pretty shrub with a very hard stem, small leaves and attractive white flowers), and the fascinating Pelargonium cotyledonis, or to use its local name "Oldman-live-for-ever." The collector who gets his own plant of the latter, is, in my humble opinion, as worthy of hero worship as the man who gathers his own Eidelweiss. I have not yet seen it growing where Nature planted it, but hope one day to find it growing in an accessible spot.

The flora of Diana's Peak is of a misophytic type and includes many kinds of ferns which all resemble each other in the firm, leathery texture of their fronds, for they all lack the delicacy of the ferns of humid tropical forests or even of an English woodland. The family Compositae is well represented by various species, all of them small trees with rather thick, heavy leaves and white flowers. During the flowering period one is readily reminded of an English hillside covered with Hawthorn in early May. It was on these slopes that a Kewite attempted to establish Quinine some fifty or more years ago and plants of *Cinchona officinalis and C. succirubra still exist. He was recalled on the grounds of economy and so trials of this and other crops ceased.

Between these two last strongholds of the indigenous flora are the lands of greater interest to the agriculturist, and on which the very existence and the future prosperity of the population depends. Here it seems that anyone from a tropical or temperate country would find at least one plant with which they are familiar. The different species of plants that have been introduced to St. Helena during the past three hundred years must amount to an enormous number and it is a fairly safe conjecture that the failures far outnumber the survivors.

The commonest trees and shrubs which have become naturalised are Pinus Pinaster, Podocarpus elongata (Cape Yew), Juniperus bermudiana, Araucaria excelsa, Pittosporum viridiflorum, Olea sp., three species of Acacia, Buddleia madagascariensis, and European Furze. A study of the present flora is always interesting. The other

^{*} The cultivation of Cinchona was first tried out by Mr. J. H. Chalmers, who was sent out from Kew in 1869.

day, I was amazed to find a small Beech tree in a neglected plantation of New Zealand Flax in company with a group of self-sown Acacias!

Showy flowering herbs are represented by various Pelargomums, a yellow *Helichrysum* and the Arum Lily which grows in every damp spot in the greatest profusion. Considering the great variety of introduced plants, one would expect to find several different grasses, but they are all too few, a fact made manifest by the poorness of the pastures. The ubiquitous Doob Grass (*Cynodon Dactylon*) of course is present, but possibly because of an insufficiency of lime, does not grow with its usual freedom. The paucity of grasses in the indigenous flora is attributed to the thick forests which are said to have covered the whole Island when it was first discovered, so that the conditions necessary to the development of endemic herbs were lacking.

The climate of the higher lands is very pleasant and resembles that of an English summer, but one never knows when to expect rain. The rainfall varies from about 60 inches a year on Diana's Peak to 6 inches on the coast. Although rain falls on the agriculture area more than half the days of the year it comes usually in the form of light showers which hardly moisten the soil, so they are of little benefit to the farmer. The greatest difficulties of cultivation, however, are primarily due to the south-east winds which often blow continuously for many days together. The only tree that can withstand their onslaughts and keep a perfectly vertical trunk in fairly exposed positions is the *Araucaria*. It occasionally forms two or even three trunks but it never bends.

There is much of interest in the Island, but to conclude without referring to Napoleon more than once would be sacrilege. The English resident cannot fail to realise the respect, awe, almost fear, with which our ancestors regarded him. Every possible hilltop still carries the ruins of lookouts or gun emplacements, erected to frustrate any attempt at escape or rescue during the years of the Emperor's exile.

K.E.T. Feb., 1935.

^{* (}St. Helena lies in lat. 15° 55′ S., and long. 5° 42′ W. It is 1,140 miles from the African continent, 700 miles south of the Island of Ascension, 955 miles south of the equator and about 4,000 miles from England. It was discovered May 21st, 1502, by the Portuguese, in Dutch possession until 1651 when the East India Company took control and transferred to the British Crown in 1833, and has been under British jurisdiction for more than 280 years.

Historically, it is chiefly remembered in connection with the exile of Napoleon I. After the defeat at Waterloo he was a prisoner on St. Helena from October 15th, 1815, until his death on May 5th, 1821.)

THE ASSOCIATION OF NEW ZEALAND KEWITES.

A reunion of Kewites in New Zealand was held in Dunedin on January 22nd, 1935.

The President of the Guild, Mr. William Hales, A.L.S., V.M.H., sent the following message to be read to those assembled:—

- "The members of the Kew Guild at home send through their President, fraternal greetings to all members in the Southern Hemisphere and especially to the Association of New Zealand Kewites gathered in Dunedin at their reunion during Horticultural Week.
- "We rejoice to know that the spirit of comradeship which the Guild stands for, should find expression in widely different parts of the world wherever its sons are called upon to uphold the prestige of Kew, and periodical gatherings such as you are now engaged in should, and can, do much to strengthen and cement old friendships and engender new ones.
- "Long may your Association flourish and continue to grow in usefull service to the country of your adoption, and your work reflect its lustre on our great alma mater, to whom we one and all owe so much."

We hope to publish a full report of the gathering in our next issue.

THE ASSOCIATION OF KEW GARDENERS IN AMERICA.

Mr. W. H. Judd writes from the Arnold Arboretum, "The General Meeting and Annual Dinner will be held at the Hotel Roosevelt, New York City, on Saturday, March 23rd, 1935, at 6.30 p.m. I appeal almost every year for support to the Kew Guild Journal by notes or articles from the members in the States, and when a local issue was suggested two years ago, I opposed it, stating that if anyone was anxious to write they could always send to the Hon. Secretary and Editor at Kew. I fail to see how far we could get with a bulletin here, when so few of our members write for the Journal. I have not seen James MacGregor for a year or so, although he lives only about ten miles from here and I believe is still hale and hearty. Bob Cameron has left Ipswich, and now lives in Boston, but I cannot find out where. He does not show up at any of our reunions here. We are having nice open weather for this time of year (December 5th), with little frost so far, while in contrast, skating was in full swing a year ago."

It will not be possible to include a report of the Annual Dinner, etc., but may we take this opportunity of appealing to our American members, to support the *Journal* by means of articles or notes of interest. To those members who have fallen in arrears with their subscriptions may we say, "Pay up your debts, and be free from further liability by paying also the Life Subscription of Two Pounds."

A MOROCCAN MOTOR RIDE.

Should you be destined to visit Morocco it may happen that early one morning you will be having breakfast in surroundings suggesting the last word in up-to-date comfort and orderliness in the dining saloon of a large British steamer lying off Tangier. Shortly afterwards, having come ashore by a "chugging" motor boat you will find yourself in the large bare, Customs House, being jostled by a scurrying, screaming swarm of black and brown porters, to all appearances eternally on the verge of a free fight. The contrast will strike you as bewildering but intensely interesting.

Having disentangled your baggage and seen it disappear into the blue in the custody of a jabbering bearded ruffian, any mild anxiety you may feel as to its fate will be swept away in the excitement of walking through the old, narrow streets and of discovering that you are most incongruously and inappropriately garbed. You will apparently have dropped into a scene reminiscent of biblical times, two thousand years away from the liner you left so recently and from the clothes you are wearing at the moment. To experience this alone and for the first time is most enthralling, or so I found it. The culminating point, however, after threading my way through the ancient alloy ways was to reach the Market Place—a spot which held me spell-bound. The infinite variety of human types and the countless new scenes that caught and held my gaze, seemed to supply enough of romance and interest to keep me rooted to the place for many a day, and with no wish to go further.

And then by chance one evening a scrap of conversation reached my ears. It concerned a "hidden" city somewhere in the mountains to the south-east of Tangier, in Spanish Morocco, and I gathered that the speaker had been there recently. It sounded tremendously alluring, and from that time, to the interest of my present surroundings, was added the thought of a possible trip, if time allowed, to this remote spot which I found was named Xauen or Chechaouen.

It seemed that it had been a mysterious city from the time it was founded by Abu Mohamed El Hassan El Alami (otherwise "Abu Yumaa") about the year, 1470, until 1920, when Spanish troops discovered and entered it. Up to the latter date no Christian had passed its gates. Its existence was known, but its whereabouts remained a total and engrossing mystery and legends rather than history surrounded it. In its early days the town must have been the scene of much fighting at the time of the Portuguese invasion of Morocco, and it was here that "Abu Yumaa" lost his life in battle. His successor and cousin, Moulay Ali Ben Mousa Ben Rached, carried on his work and the city is a lasting memorial to these two warriors.

To a stranger like myself all this appealed irresistably—I think that the appellation "hidden city" had as much to do with it as anything—and I made up my mind to visit this intriguing place even if I had to make the journey of about 120 kilometres by the 'bus,

which I understood ran occasionally and was usually crammed to overflowing with Arabs. This didn't sound too attractive, however, so having discovered three more enthusiasts who wanted to visit the place we decided to join forces and go by car. Easier said than done! We were all lean-pursed and the car owners were all imbued with large ideas.

We were thinking somewhat dubiously that it was to be 'hus on nothing, when a European resident of Tangier knowing how keen we were to get to Xauen, came to me and said that he knew of a taxi driver who would be willing to undertake the journey at the price we had fixed as our limit. At the same time I was told that the car was none too good, and that if we engaged it we did so entirely on our own responsibility and that everyone else washed their hands of the affair. We had no second thoughts about it. A car was available, and however second-rate that car might be, it seemed preferable to travelling 120 kilometres—or rather 240 kilometres counting the return journey—in an odoriferous and possibly insectiferous 'bus.

So through our friend we engaged the driver to come early with his car on the following day—my last in Morocco—and went to bed feeling very pleased with ourselves.

Next morning the car arrived—an hour late—with a driver who spoke only Spanish, of which language none of us knew a word, and with tyres that had definitely seen better days and many bad roads. However, at that stage its engine worked and its wheels revolved, so we were content and started off.

At the frontier between the International Zone—which extends some distance beyond the actual town of Tangier—and Spanish territory, our passports were examined and we proceeded along a second-class road with low hills a short distance away on either hand. Practically the entire countryside is clothed in a green mantle of dwarf palms growing low on the ground, which at a distance gives the impression of grass-covered land. Storks, haughtily seeking their breakfast, pecked the ground with their long red beaks in a dignified leisurely manner, and were surrounded by flocks of white birds rather resembling seagulls, but which I was told were land birds called, locally and inelegantly, "tick-birds."

We passed small groups of country folk tending their goats by the wayside or overtook occasional horsemen, for the most part mounted on very fine horses. Tiny patches of cultivation appeared here and there on the hillsides and solitary figures in drab brown hooded garments could be spied every now and then, trudging across country barefoot, their destination probably some distant and isolated hut.

We had been travelling for, perhaps, three quarters of an hour along the Tetuan road, when with awful suddenness a most devastating flapping noise was heard, the car gave a slight lurch and bump and our driver stopped.

We all got out and found that our rather natural suspicion regarding the tyres was justified, and that about a foot and a half of the outer cover of one of the back tyres was hanging loose exposing the canvas lining. It had such a "jumble-sale" look about it that we were doubled up with laughter at such a beginning to the day's outing, but I know too, that I had a moment of intense anxiety as to whether we would reach Xauen that day, which was my last chance of getting there. We foresaw in any case, a delay in putting on the spare wheel, but not a bit of it! In dumb show, the driver, apparently unequipped with tools of any kind, demanded a penknife. This was produced and with great composure he merely cut off the flapping strip of outer cover, and climbed back into the driving seat with a smile of satisfied accomplishment and beckoned to us to get in also. We glanced at the "spare" in passing and rather agreed with the driver that it was an even more forlorn-looking object than the one he had operated on.

Anyway we were off again, in the right direction which was the main thing, and all went well as we got on to the stretch of first-class road going to Tetuan and beyond. This runs through the Riff country which was the scene of fighting up to a very short time ago, and what country to fight in! Wild, rugged and very steep hills met our gaze everywhere with deep valleys between them and with folds and ledges of ground by the hundred in which snipers could lie concealed in almost complete safety and fire at anyone who showed himself. One of our party had seen much fighting throughout the Great War in many different types of country, and he scanned this recent battlefield with a practised eye and pronounced it very bad.

A few kilometres short of Tetuan we turned sharply to the right and came on to the second-class road to Xauen. This leads over the Rio Martin and along the valley of the Hayera, while on the left tower the grand and jagged mountain-peaks of Beni Hosmar. On to the sides of these mountains the road eventually finds its way, and climbing up and up in a series of the sharpest corners and S-bends, reveals at every turn—if one is not too busy breathlessly wondering whether the length of the car is not greater than the width of the road at the sharp turns—utterly splendid pictures of mountain grandeur, of the most rugged and ruthless description.

The road in most places is cut out of the sides of the hills which loom immediately above you and drop in dizzy fashion almost sheer down from under your wheels. Here and there you pass an isolated military outpost with a handful of soldiers, a telephone and the "Nécessaire pour accidents," as our French pamphlet put it! This latter is apparently no useless precaution as far as road accidents are concerned. We passed three or four remains of motor cars lying in broken heaps below the road. It appeared as if they had just slipped over the edge.

The few country people we saw were of the most primitive appearance and lived in the rudest encampments. Small groups of dwellings or solitary tents composed of skins or bits of cloth flung over a few sticks, housed dark-skinned, wild-looking people, who peered out at the car as it went by, and the men nearly all carried firearms.

The valleys were so vast that it was only every now and then as you gazed across them, that a small hut would detach itself indis-

tinctly from the admirably camouflaged background of greeny-brown vegetation and dun-coloured rock—a tiny speck with scarcely even a track approaching it. We thought what strange lives the inhabitants must lead, and what a different meaning "material cares" has for different people.

The highest point of the road, at Souk El Arbaa, reaches about 700 metres and at the time we were there, in February, it was distinctly chilly at that altitude and there was a fair amount of snow on the mountain tops. From Souk El Arbaa the road gradually and tortuously descends to 250 metres, revealing more lovely valleys and rivers as it unwinds, and having crossed the bridge of Fomento over the river Lau it climbs steeply once more to about 600 metres. Ahead is a barrier of hills with two high peaks behind them. You round the corner of the screening hills, and come with startling suddenness on Xauen, lying in the hollow below the double-peaked mountain from which it gets its name—Xauen means in Berber language, "two horns."

It is no wonder that before a road was constructed the town remained hidden for so long. It faces west and is almost completely concealed by the mountains or low protecting outcrops of hills, and the site must have been almost ideal for the purposes of defence in the days when the town was first built.

The first and most overwhelming impression that I received was one of strength. This was conveyed by the magnificent walls of the Kasbah which enclosed the town at one time, the whole city being as a fortified castle. The immensity of the castellated walls and towers remain to impress one inevitably, with a sense of might.

In contrast, were the light and graceful minarets of the many mosques, and they awed us in another way. We were there at the hour of prayer and saw the Muezzin come out on to the tower of a mosque close at hand, and heard his call taken up from one minaret to another till it died faintly in the distance. In conveyed a sense of faith and peace in that fortified place.

Outside the walls of the old city they are, alas, constructing a new town and even facing the ancient market place there is a small, new and up-to-date hotel almost completed. Turn your back on these signs of the present day, however, and you feel as you gaze at the huddled streets and houses, the veiled women and the fierce-eyed men in their dark, home-woven woollen garments, all in the protecting shadow of the marvellous Kasbah, that the actual life of the people, can, in the main, have altered little in the last 500 years.

We wandered through the streets, up little back alleys which would sometimes bring us to a dead-end or lead us into others even narrower and dirtier. The people gazed at us, silently for the most part, a few silently followed us. It was very different from other tourist-haunted Moroccan towns which I have visited. No one pestered us to buy their goods. No doubt that will come and come soon, for a new, more direct and better road is in course of construction across this part of the country and the new hotel will attract visitors. We felt glad to have seen it before it became too much on the beaten track.

Marvelling at the close proximity and strange contrast of orange trees in fruit and snow-capped peaks, we wandered inside the Kasbah walls, and found that flowers had been planted in their shadow and that storks were nesting on the towers, but we had no time to pursue our explorations as far as we should have liked. We had the long run to Tangier ahead of us over a road which we now knew was definitely difficult to negotiate; we had three bad tyres and one scarcely worthy of the name at all, and we had no intention of letting darkness overtake us on the way back under these conditions.

So we found the car and climbed in whilst the driver went through the preliminaries of starting her up. Though he tried hard, nothing happened. Then it began to rain and suddenly, with a bronchial cough, the engine decided it wanted to get going and we set off once more.

Immediately and abruptly Xauen was cut off from our sight behind its sentinel hills, and the two snow-capped peaks looked down on us from an apparently uninhabited land. The sight has to be seen to be fully realised.

The rain continued and the difficulties of the road were increased by the surface becoming slippery, and the tyres had no gripping power. Skids we had in plenty, but mercifully none as we rounded those multitudinous and awful bends. One under those conditions would almost certainly have been our last.

The scenery, however, even in the rain, was so grand that we sat spell-bound and there were moments when the drizzle cleared. During one of these I asked to have the car stopped to take a photo of a lovely river valley. What curses I brought down on my head! It took me only a moment to snapshot the view, but in that moment our driver shut off his engine instead of profiting by past experience and keeping it running, and it needed about ten minutes of Spanish (and English) imprecation—mostly directed at me—and sundry dives into the inside of the machine before it consented to start again. Of course the snap was not much good either. What small camera could convey such a vast and splendid scene? Still, such as it is, the print reminds me not only of that lovely view, but of a rich vocabulary of words I had not heard before.

Off we went again and at last reached the point of contact with the Tetuan-Tangier road. This was familiar ground to the driver and he fairly let his old car go. We tried to slow him down—would that tyre burst or would it not —but he could not or would not understand. Anyway he simply raced towards what was coming to him and Nemesis overtook him—and us—when we were still a long way from Tangier. I would not like to say at what pace we were travelling, when without any warning, the most appalling clattering and clanking noise suddenly broke out in the interior of the car. It was simply shattering and afterwards we laughed helplessly at the recollection of the expressions on our faces—mingled alarm and utter bewilderment! The car was brought to a standstill and the driver once more climbed down whilst we followed like sheep, expecting to see old bits

of the engine strewn upon the road. But there was nothing visible, though it was obvious from the noise they had made, that the various portions of the internal anatomy of the car were not where they should have been. Up went the bonnet again, in dived the upper half of our driver, leaving a shiny-seated pair of trousers and down-atheels pointed leather boots for us to gaze at. After a moment or two he emerged, his long nose looking longer, his tight-lipped mouth more trap-like and his head wagging dolefully from side to side. Then he grabbed the starting handle, but a few ineffectual efforts showed that nothing would turn it and we realised that the engine had seized up.

It was a rather awkward predicament. Another hour or two and the short-lived dusk would be upon us, and the Riffs are not always too pleasant to meet away from the towns and in their own surroundings. We gathered that the driver did not know how far we were from Tangier—he put up both hands with fingers spread, then two fingers again and shrugged his shoulders wearily, and we supposed that meant a possible twelve kilometres (it turned out to be nearer 20).

There was nothing to do but to walk, so leaving the Spaniard tinkering futilely at his old bag of tricks, we set forth. The rain which had kept off for a bit now decided to set about gently but thoroughly wetting us. We could not help seeing the ludicrous side of the whole thing, but laughter only hampered our progress and we steadily got wetter and wetter. Never has any road I feel sure looked more completely interminable and so utterly devoid of vehicles of any description. We were away from the mountains in hilly country and that road appeared and disappeared over ridge after ridge till it vanished, a mere thread, over a hillcrest in the distance.

We had been walking for some time when a lone road-mender appeared. We asked him, "Tangier"? "Kilometres"? He spread the fingers of both hands aloft, then put up two fingers and shrugged his shoulders!! Still a possible twelve kilometres! On we trudged, passing one or two small groups of country people who gazed at us curiously.

We had been on the move some time and were no longer so desperately interested in the scenery as we had been, when a faint sound made us look back hopefully, but one of the inevitable hills stopped our view. A few seconds later, however, to our relief—for it seemed that Tangier would always remain twelve kilometres ahead—we saw a car overtaking us. It must have been about the only one on the road that evening, and as it reached us it drew up and there, standing on the step, was our chauffeur. Inside, to my amazement was an English botanist well known to Kewites and three other passengers. There were five of us, but the occupants nobly insisted on taking us all, draped inside and outside of the car all the way back to Tangier. Long will we remember their kindness. We must have looked pretty odd, but at the frontier the Christmas-tree-like car did not raise a smile out of the supercilious Spanish official in charge. Our passports were in order and that was all that mattered. "Most tourists are mad and a nuisance," his cold contempt seemed to convey.

Once back at the hotel we began to realise fully that if a car in Tangier is pronounced to be second-rate it probably is so, and we further saw quite clearly why no responsibility would be taken by the resident who had told us of this particular car. We blessed him all the same. We had had our trip to Xauen and several additional thrills thrown in and Xauen was worth it all.

I left Tangier early next morning to join a tramp steamer calling at Mediterranean ports, but I often wonder what became of that car and whether its owner just left it at the spot where it raised its last protest, as another landmark on the Tangier-Tetuan road.

C. S. W., 1934.

MR. JOHN M. HENRY.

We are indebted to Mr. A. Osborn for the following details regarding the life of Mr. John M. Henry, who at the age of 94 years, is still hale and hearty, and to quote his own words, "able to lead a very happy life."

Mr. Henry was born in the parish of Inverkeilor, Forfarshire, Scotland, on September 16th, 1841. Always being keenly interested in flowers and their culture and in landscape gardening, he came to Kew in 1865, and left on March 12th, 1866, to extend his knowledge at Mr. E. G. Henderson's nurseries at St. John's Wood. Some time later on the recommendation of Kew he proceeded to Madras under a five years' agreement, and at the end of this time, went to the Nilgiri Hills for a further three years. Later he was engaged by the Rajah of Durbunga to lay out extensive gardens around the palace, proceeding later to Baroda.

The Maharajah of Baroda was then eighteen, and when he took over his throne and estates, there followed a complete renovation of all the parks and gardens. Mr. Henry was for sixteen years in charge of all the parks and gardens, and among other important duties, he laid out the grounds of the palace at Umrat, some 200 miles from Baroda. He left India for England in 1895 and took a nurseryman's business at Hartley Wintney, Hampshire, and his son, Mr. Oswald Henry, is now his successor in the business.

We extend through the medium of the *Journal* our best wishes to Mr. Henry.

THE KEW GUILD BADGE.

The coloured plate accompanying this issue has been prepared by Mr. Frank L. Simmonds, who is at present employed at Kew (he is sub-foreman of the Flower Garden). Blazer Badges and ties can be obtained from the Hon. Treasurer of the Guild at 2/8d. each, plus postage. All orders should be prepaid and postage included.

AN OLD KEWITE'S VISIT TO BERMUDA AND THE WEST INDIES.

Fifty years ago, in common with most young gardeners of my age, the glamour and romance of the tropics made a very strong appeal to me, and one of my boyish ambitions was to secure a post abroad or to travel for a time in foreign lands. Needless to say my sojourn at Kew stimulated and strengthened—and at the same time gave definite form to—this desire.

I well remember when on duty in No. 4 Greenhouse one dull, January morning in 1889, my work-mate—Arthur Kime—pointing out a young Kewite (whom I have since learnt was Robert Proudlock) passing through the house paying his farewell visit to the Gardens before taking up an appointment in the Colonies. This was the first gardener I had ever seen actually on his way to the tropics and my youthful imagination was fired with the experience, and I pictured to myself the sights he no doubt would be seeing soon and the many adventures he was almost certain to take part in.

Notwithstanding my ambition to go abroad fate had apparently mapped out some other course for me and it was only by the merest accident and by a stroke of wonderfully good fortune at the close of my official career, that my early longings were to some extent fulfilled and I was privileged to see with my own eyes the wonders and beauties of tropical vegetation in its native habitat.

On the occasion of my reaching the age limit and having as a consequence to retire from the Manchester Parks Department, my staff, in place of presenting me with an illuminated address, very generously offered me a unique parting gift in the form of a ticket for a cruise either to South Africa or to the West Indies. For various reasons I decided upon the West Indian Cruise.

As during this trip I had the great privilege of meeting and enjoying the hospitality of no less than eight Old Kewites—one alas! has since passed over to the great majority—our Editor has asked me to write a short account of what was to me a wonderful and unforgettable holiday, in the hope that it may interest some readers of the Kew Guild Journal.

Not having any desire to travel alone, I persuaded my wife to accompany me on the cruise, although she herself never had any desire for life in the tropics, stoutly maintaining that the temperate zone was quite good enough for her. Having, however, undertaken the trip, she like myself, enjoyed every minute of it, and I think would be quite prepared if the occasion arose to do the same journey with me over again!

We joined the steamer—the P. & O. "Viceroy of India" (20,000 tons)—at Tilbury, on December 21st, 1932, on one of the brightest and warmest December days I can ever remember in London. It certainly seemed somewhat ironical that many of those making this

pleasure trip were doing so in order to escape the fogs and other climatic trials of an English winter, and yet were leaving behind them such glorious weather. We learned by wireless afterwards, however, that the weather at home soon changed for the worse, when probably our friends there would be envying us enjoying—as they would think warmth and delightful sunshine. As a matter of fact we had our own troubles to contend with, for when only twenty-four hours out we ran into what we considered a very severe storm. This caused a good deal of discomfort to many passengers who heartily wished themselves back around their own fireside again in dear Old England. The storm delayed us so much that we were unable to call at Fyal in the Azores where it had been arranged we should spend a few hours ashore on Christmas Day. It was a source of amusement at the time to read in our daily "Wireless News" extracts from some of the English Newspapers describing the festivities passengers were enjoying on board the "Viceroy of India" while she was anchored in port at Fyal. Many of our friends who had the privilege of reading those accounts in the original in the home papers would no doubt be green with envy. So far from our being safe in port our ship was battling with the storm well out in the Atlantic, while many of its passengers were confined to their cabins feeling in anything but a festive

Quite apart from the personal discomfort caused by the storm the delay meant that instead of our getting a turn on shore four days out from London, land was never sighted until we reached Bermuda ten days after leaving Tilbury. Some passengers considered this a hardship and had to relieve their feelings by grumbling a good deal. So far as my wife and I were concerned, the sea voyage was such a novelty to us that it was a never ending source of interest. Once the weather improved—as it did after five or six days—and the social life on board began to react upon us we would not have found it any hardship had another few days elapsed before reaching land.

One hardly needs to go on a sea trip to discover how small after all the world is in these days. Our first day out while taking an airing on deck we came face to face with a gentleman who had been a near neighbour of ours when we were living in South Wales twenty-five years before. Needless to say we frequently forgathered during the trip to have a chat about old times and old acquaintances. One day a fine typical old English Gentleman stopped me on the promenade deck and said, "I understand you are the late General Superintendent of the Manchester Parks. I have heard your name mentioned by Mr. Hay, of Hyde Park, for whom I have the highest regard. In my estimation he is one of the finest gardeners in Great Britain." This gentlemen's acquaintance with Mr. Hay together with his love of a garden proved a point of contact between us (although he was a baronet and I only a retired public official) which resulted in our having many friendly chats together during the voyage.

Before going on our trip, I secured a copy of a popular guide to the West Indies. This I lent for a time to one of my fellow travellers who, while reading it one day, entered into conversation with a gentleman sitting on a deck chair next to him. Showing him the Guide he

asked if he had read it, to which his neighbour replied, "Yes I have read it several times." "Well, then," said his questioner, "You must think like me that it is an excellent book?" "That," was the reply, "is somewhat difficult for me to answer as it happens I have not only read it but have also written it." The Author happened to be Sir Algernon Aspinall, the Secretary of the West Indian Committee, who was taking the trip with Lady Aspinall in order to visit the principal West Indian Isles. Happening to come up at that moment the borrower of my book kindly introduced me to Sir Algernon who I soon found knew the Director of Kew and many Kewites. I further discovered that like myself he was looking forward to meeting Mr. Cradwick at Jamaica who was a very old friend of his.

Incidents such as these, interspersed with the ordinary routine of ship life, tended to make the time at sea pass pleasantly and all too quickly away.

Bermuda, our first place of call, although the oldest self-governing colony in the British Empire, is, I understand, to-day practically owned by rich Americans who have made it a fashionable holiday resort for New Yorkers. As a consequence of this, the cost of living here is almost prohibitive except for the wealthiest classes.

The steamer cast anchor shortly after 6 a.m. on December 31st, in Grassy Bay some three miles out from Hamilton, the chief town of the Bermudas. This was a memorable day of our trip but more especially for those who like myself had never before visited such distant lands. Most of the passengers were up betimes so that they might get an early glimpse of the low lying land which appeared on either side of us.

After a hurried breakfast the passengers made a regular exodus to the shore by means of a small pleasure steamer which the Company had hired to convey us to and from Hamilton during the day. My wife and I were fortunate enough to get off by the first trip and were very delighted on landing at the quay to find an old Kewite in the person of Mr. J. C. Nauen of the Department of Agriculture waiting to take us under his wing. As motor cars are not permitted on the Island, Mr. Nauen provided us with a horse-drawn chaise in which he soon landed us at the Agricultural Station. Here we were introduced to the Assistant Director and I found that although not a Kewite, he came from a part of Wales which I knew well, and where he and I had mutual friends. These formalities over Mr. Nauen took us to visit the gardens and experimental plots where I saw much to admire and interest me.

Prior to my visit to the West Indies, I am afraid I was prone to think of our Colonial Botanical Gardens in terms of my own calling and visualise them as glorified public parks where the trees and shrubs of the temperate zone were replaced by innumerable species of brilliantly coloured flowering trees and shrubs together with many kinds of rare palms of which in each instance only diminutive forms were represented in stoves or hot-houses in gardens at home. Our tour of the Bermuda Station soon corrected this view, for although I found here as elsewhere during my holiday the Botanical gardens were

furnished with all kinds of most beautiful plants, yet their real value to the local community is economic rather than aesthetic; they are commercial institutions even more than they are amenities.

As a great export trade in vegetables, fruits and flowers takes place from Bermuda, the Agricultural Station here is a real asset to the growers whose interests are carefully looked after both by the practical horticulturists and the scientists on the staff. Systematic trials of different varieties of vegetables, fruits and flowers are carried on from time to time in order to find out those of the greatest worth and best suited for growing on the Island. In the same way constant attention is given to the control of plant diseases and insect pests, all of which results are available to cultivators.

After lunch, Mr. Nauen very kindly took us for a long drive which proved both a pleasant and comfortable method of seeing some of the sights of the islands, especially as our time was so limited. During the drive we passed through some very pretty country and saw examples of different types of the local scenery. The sight of masses of hibiscus, poinsettias, lantanas, bouganvilleas, acalyphas, crotons and many other brightly coloured plants were a never ending source of delight to my wife and myself on that afternoon. Indeed everything seemed too wonderful to be true. Even the fish we saw in the Aquarium where we called at one point of our journey, were so abnormal in form and colouring that we could hardly think they were real.

Just as darkness was falling, Mr. Nauen saw a very happy couple board the tender which was waiting at the Quay in readiness to make its final trip for that day to the "Viceroy of India." We felt deeply grateful to him for making our visit such a pleasure to us and for his delightful courtesy notwithstanding the fact that up to that day we had been mere strangers to each other. We tried to voice our feelings but his characteristic response was that as a Kewite himself it was a real delight for him to meet another Kewite out in Bermuda and extend a brotherly welcome to him.

Three days later—January 3rd—we were 1,100 miles farther on our journey, and judging by the heat we were enduring, considerably nearer the Equator. Early that morning our ship reached the landing stage at Kingston harbour, Jamaica. This was the only port of call during the whole cruise where the water was deep enough to permit of the "Viceroy of India" sailing right into the harbour—a circumstance which we found had advantages as well as disadvantages.

Our visit to Jamaica was unfortunately tinged by a feeling of sadness. Mrs. Cradwick whom my wife and I met with her husband some years ago, at a Kew Guild dinner in London, had died very suddenly only a short time before we left England. It had been her wish that during our stay at Jamaica we should spend a short time at their home in Mandeville, but her kindly intentions in this direction were never to be realised. It was with this shadow of sorrow overhanging him that on the morning of our arrival Mr. Cradwick and I met on board the "Viceroy of India" whither he had come to greet his old friends Sir Algernon and Lady Aspinall.

I was pleased to see him looking so fit and appearing very little altered from the last time I saw him in England. He was accompanied by his niece who had been residing with them for a number of years previously and is now looking after him and his home at Mandeville, to which district he retired some years ago. Incidentally it should be mentioned that even now he is not resting on his laurels but is an active cultivator and still competes at horticultural shows.

After the salutations and numerous necessary introductions were over, Mr. Cradwick took us all by motor car to beautiful Hope Botanic gardens of which he was for many years the popular and efficient superintendent. This garden is delightfully placed having as a glorious background the famous Blue Mountains. While Mr. Cradwick and the two ladies rested in the shade, Mr. Downes the present superintendent—another old Kewite—took charge of me and together we spent a most enjoyable hour making a short tour of the gardens and inspecting great numbers of plants which were both useful and beautiful but whose names by this time have completely passed from my memory. Among the many things of interest I noted that morning was a collection of rare orchids whose only protection was that afforded by the overhanging branches of tall trees. Mr. Downes is keenly interested in this collection and at the time of our visit was busily engaged in raising numbers of hybrids whch I sincerely trust will result in the production of many new and useful forms.

As Mr. Cradwick and his neice had an important engagement to attend to, we parted company early in the afternoon, and we did not see them again until they came aboard our steamer on the following day an hour before we sailed, bearing a parting gift of some luscious fruit which we later greatly enjoyed. His farewell words to us were an exhortation to re-visit Jamaica the following winter and spend a part of our time as his guests at his home in the highlands of Mandeville.

When our friends left us to keep their appointment, Mr. Downes was good enough to invite us to his home which is situated amidst delightful surroundings in a secluded part of the gardens. Here we were introduced to Mrs. Downes whom we found to possess a most kindly and charming personality. We were made very soon to feel perfectly at home and on being asked to stay for afternoon tea and thereafter to dinner we gladly accepted. This warm-hearted reception was of such a genuine character that our visit to Hope Botanic Gardens will always remain an outstanding memory even in connection with a holiday that was so full of happy and pleasing incidents.

The dinner which was served after sundown outside on the veranda was an experience neither of us will ever forget. We had often read about the beauty and charm of tropical nights and no doubt had often imagined what they were like but here for the very first time in our lives we were actually enjoying the reality, and that without in the least feeling disillusioned. Our whole surroundings appreciated by both sight and hearing—the brilliant stars, the moving fireflies, the myriads of whistling frogs and the calls of night birds from all directions—were of such a novel character that for the time being we were carried away by a spirit of romance.

Dinner over we adjourned to the drawing room where we had a most enjoyable musical evening, for Mrs. Downes is a talented musician, being an accomplished vocalist, violinist and pianist. The kindness of our host and hostess did not end at their home for they drove us to the Hotel where we were putting up for the night in Kingston and called there again in the morning to take us a 20 mile drive to see over the Castleton Botanic Garden, which is one of the sights of the Island. The grounds at Castleton are beautifully laid out and have been conceived with a view to making them ideal for plant life, and at the same time a real joy to travellers. Here, as at Hope Gardens, I was introduced to many different species of plants whose names even I had never heard of before. Three of the plants met with on that memorable day, however, I am not likely to forget. The first was Amherstia nobilis, a tree which grows to a height of 30 or 40 feet and carries achemes from 5 to 6 feet long bearing numbers of large vermillion coloured flowers. This is regarded as one of the most beautiful flowering trees in the vegetable kingdom and once seen it can never be forgotten. The second was Stifftia chrysantha, a tall shrub which at the time of our visit was bearing numbers of large solitary flowers. I am afraid the only reason for my remembering this plant so well is that notwithstanding the unusual appearance of its flowers I immediately placed it in its correct natural order—Compositae—a feat of which I was inordinately proud. The remaining plant was a Pandanus about 20 feet high which being covered with a mass of golden yellow fruit was a truly striking object growing amidst numerous palms. So far as I can now remember the specimen in question was Pandanus utilis.

The scenery throughout our forty miles drive was of a typically tropical character and gave us a very fair idea of the vegetation to be met with in Jamaica. On our arrival back at Kingston in the late afternoon we had reluctantly to say farewell to our newly found friends, but we parted with the sincere hope that we may meet once again. We shall always regard Mr. and Mrs. Downes as the incarnation of hospitality.

Following on our strenuous period of sight seeing in Jamaica, we were quite pleased to have the opportunity of enjoying a quiet time and rest during the two days passage from Kingston, Jamaica, to St. Johns, Antigua, where we arrived early in the morning of the January 7th. Our visit to this Island proved most enjoyable, and more than usually interesting to the majority of the passengers on account of its close historical connection with British Naval Actions in that part of the world during the eighteenth and early part of the nineteenth centuries. Many relics of Lord Nelson are still on view in the Admiral's old house at English Harbour, where Nelson resided during the time he was refitting his ships in 1805 after his battles with the French.

Our stay being very short we made the most of our time by hiring a motor car which enabled us to see quite a lot of country. Although the scenery is not anything like so fine as what we saw in Jamaica, nevertheless, the drive proved a very pleasant one. For the first time I saw pineapples, eucharis, pancratiums, pilocereus, opuntias, agaves

and other succulents growing wild on the roadsides. I gathered a few fruits of a pilocereus from the seed of which the curator of the Cacti collection at Manchester later on raised quite a number of young plants. Incidentally I ought to mention that although during my trip I collected a good many different kinds of seeds, those of the pilocereus were the only ones to arrive intact. All the others were found to be eaten up or damaged by the larvae of insects when the packets were opened up after I reached home.

During the following week we put in a most hectic time calling at different Islands almost every day. Sunday we spent at Dominica, Monday at St. Lucia, Tuesday we explored St. Vincent, Wednesday we were on Granada, Thursday and Friday we were at Trinidad, and Saturday saw us at Barbados our last call in the West Indies. So hurried were we in our tours that we must have rivalled the proverbial American trippers. However, even from this turmoil of sight-seeing, certain incidents and experiences stand out clearly defined and are among the cherished recollections of a very happy time of our life.

On Sunday morning, January 8th, while having breakfast in the dining saloon a message was brought to me that a gentleman had come aboard from Roseau who wished to speak to me. This proved to be an old Kewite, Mr. Harcourt, the Curator of the Botanic Gardens and Superintendent of the Department of Agriculture, Dominica. He had very thoughtfully come on board thus early in the morning to conduct me to the Botanical Gardens where he had arranged that I should meet my old friend and co-worker at Kew, Mr. Joseph Jones, who was Mr. Harcourt's predecessor in charge of the Agricultural Station at Dominica. Thus does the freemasonry among Kewites manifest itself wherever Kewites are to be found! During our passage ashore—our steamer was anchored about two miles out—I had my first taste of a tropical shower, heavy while is lasted but very quickly over and the sun soon shining again as if nothing had happened. On the way to the Botanic Gardens, Mr. Harcourt very kindly showed me over his private residence which is in the town of Roseau and not in the Gardens. This struck me as a fine airy structure and as it was covered by wonderfully luxuriant creepers it had the appearance of being desirably cool for a place like Dominica. When he told me the high rent he had to pay for it, I could not help thinking that had I been in his shoes it would have needed the shade of a good many creepers to keep me cool on rent days!

When the Gardens were reached we were not long in finding Mr. Jones who with another Kewite—Mr. Bassett, Mr. Harcourt's assistant—was waiting to receive us. I had been looking forward to this moment, wondering if I would be able to recognize in Mr. Jones of Dominica, the young man who had wrought side by side with me in the old potting shed at the Melon Yard at Kew. Our meeting was a shock to both of us for each had overlooked the fact that in 42 years we must have aged very considerably. Neither of us had any resemblance to the two lads who worked under Mr. Frank Garrett in the Decorative Department at Kew in 1890.

After the first excitement of our meeting was over, the two younger Kewites very tactfully left us to ourselves—Mr. Harcourt most con-

siderately suggesting that Mr. Jones might himself show me around the garden which had been so long his pride and care. This arrangement enabled us to spend a very happy morning together exploring the different parts of the grounds. As might be expected the whole of our time was not taken up with discussions on plant nomenclature, or what were the most useful and profitable crops to grow in Dominica. These subjects certainly found a place in our conversation, but many were the halts we made in our perambulations to indulge in reminiscences about Kew and old Kewites.

Experimental plots wherein all kinds of economic plants are grown and carefully tested are an outstanding feature of these Botanic Gardens, and I can well imagine what a great boon the research work carried out here must prove to growers in Dominica. For Mr. Jones's valuable labours among economic plants—and especially in connection with his discoveries in relation to the cultivation of Limes—he was a few years ago decorated by the King with the Order of the British Empire. This experimental work inaugurated by Mr. Jones is still being carried on with great enthusiasm by his able successor Mr. Harcourt, who for his labours in this direction has been recently awarded a similar honour.

I should have mentioned that Mrs. Pettigrew was feeling so fatigued after our day at Antigua that she decided to remain on board and rest for the day while I was seeing over the Botanical Gardens. As, however, Mrs. Harcourt was anxious to take her for a drive in her car and thereafter entertain us to a meal, she made a special journey over to the "Viceroy" to persuade my wife to join us later on in the To this suggestion she agreed, so in the afternoon Mrs. Harcourt with her daughter motored us up a very steep hill and landed us on a beautiful plateau called Morne Bruce from which we obtained a magnificent view of certain parts of the Island, and a fine stretch of the Caribbean Sea. From here we were taken to a quaint old Club House where we were regaled with a real Dominica Tea as Mrs. Harcourt's guests. Later Mr. Jones joined us for a short while as we were quite close to his home, and under these most happy circumstances we saw him for the last time. The Club (if I remember correctly the Women's Club) is set amidst ideal surroundings in its own grounds and here we spent a restful hour until it was time to make tracks in the direction of our ship. Our friends with whom we were sorry to have had such a short—though very pleasant—acquaintance accompanied us to the landing stage where the tender was waiting to take us out to our floating home, and so ended another perfect day.

Although following our visit to Dominica the "Viceroy" called at five other of the beautiful West Indian Islands, I was able to see over only two additional Botanic Gardens and make the acquaintance of two more old Kewites before making our return voyage to Europe. This was at St. Vincent and Trinidad.

As Henry Powell—a mate of mine at Kew—was for ten years the Curator at St. Vincent, the gardens were well known to me by name, so I naturally wanted to pay them a visit while I had the opportunity. When my wife and I reached the Gardens we found (not having written him on the matter), that Mr. Jackson was in his town office, but

as Mrs. Jackson immediately put a 'phone call through to him he was not long in joining us at his home. Here in the meantime Mrs. Jackson had been entertaining us with accounts of their Island life, and at the same time plying us with a delightfully cool drink made from freshly gathered limes grown in their own garden.

The time at our disposal being very short, Mr. Jackson took me for a hurried run round the grounds during which he showed me some of the most noted specimens under his charge. I was much interested in seeing a large number of remarkably fine examples of different kinds of valuable spice-bearing trees which appeared to me one of the specialities of the garden. I was sorry to learn from Mr. Jackson during our talk that he was finding it hard and worrying to keep his Station up to the standard he would have liked. His complaint was that he was very much understaffed and was kept short of money for the very necessities of his work. At the time of our visit he was hopeful that a change was about to take place which would result in a more sympathetic consideration being extended to himself and to his work.

We learned that St. Vincent is noted for its arrowroot. A tin of this presented by Mrs. Jackson to my wife to take home with her as a sample, is stated by the latter—who has had a very wide experience of such matters—to be of the finest quality she has ever handled.

Although we were anchored in Trinidad Harbour for two days we only had time for an all too hurried visit to the famous Royal Botanic Gardens, Port of Spain. The reason for this was that one whole day—the first—was given up to a trip to the renowned Pitch Lake at the other end of the Island some sixty miles distant. The lake is a most curious and unusual sight, but nevertheless, I felt that the time spent in reaching it might have been more profitably employed in a leisurely look over the Royal Botanic Gardens or exploring certain parts of Port of Spain itself.

Besides their great intrinsic value as a botanical institution the Gardens are noted in literature as being the major theme of one of Charles Kingsley's delightfully written books called "At Last." Visitors to Trinidad ought in addition to providing themselves with the "Pocket Guide to the West Indies," carry with them a copy of "At Last" as they would find it both illuminating and interesting.

By appointment we called at the Superintendent's office at 10 o'clock in the morning and found Mr. R. O. Williams, the chief, busily engaged with his official duties. After showing us some of the rarities in the Departmental Herbarium, he very kindly gave up his morning to conducting us over the beautiful grounds which are under his charge. Before doing so, however, noticing that Mrs. Pettigrew was already looking somewhat fagged he very considerately proposed motoring her up on to the high ground to his official residence where she would be able to spend the time in comfort out of the heat, with Mrs. Williams. This meeting with the wishes of all concerned was immediately carried out, and thereafter in the company of some other visitors who had joined us we were soon busily moving about the gardens enjoying their varied beauties and admiring fine examples of the

skilful work of tropical cultivators that were evident everywhere about the grounds. We noticed that even formal flower-gardening, so dear to the hearts of gardeners at home, was not overlooked, for the Governor's House which stands in a prominent position in the gardens has its floral adornments set out in keeping with the architecture just in the same way as is done around nobleman's mansions in the old Country.

Discovering the time that had been set for our return journey was long past, I hastened to join my wife at the Superintendent's house. As I had expected, she, as myself, had passed a most pleasant morning in the company of Mrs. Williams, for like the majority of ladies they were not long in finding many tastes and interests in common, and so had not been worrying about the time.

Mr. R. O. Williams was the last of the very able band of Kewites with whom it was my privilege to come in contact during my West Indian Cruise. His connection with Trinidad dates back to 1916, when through Kew he was appointed Curator of the Royal Botanic gardens, Port of Spain. Ten years later, he was promoted to the Superintendentship, a post he has filled and is filling with ability and credit. In addition to his keenness on his arduous duties as an administrator, he is an enthusiastic field botanist, and has been for some time past busily engaged in writing a Flora of the Island. This when completed will meet a much felt want as I understand the latest available Flora dates back to the '60's of last century.

This brings the account of my West Indian Cruise to a close. It has unfortunately spun out to a much greater length than I had intended. Even so it will be readily understood that these notes barely touch the fringe of the many and varied experiences I had during my trip, or the wonderful and interesting things that I observed. Writing this account for Kewite readers, I have very naturally made the Kewites met with in the West Indies the outstanding topic of these notes.

The day after we steamed away from Trinidad we reached Barbados, where we spent a pleasant time visiting different parts of the Island. Eight days later we were on the heights of Terreiro de Lucta in the Island of Madeira while two days after that again, we reached Casablanca whence we took a forty miles motor drive to Rabat which borders on the North African desert. Our next call was London which we reached on January 28th, to find the whole of the British Isles in the grip of an unusually severe frost. From the time we left home till our return was nearly five weeks, during which time we had covered considerably over 10,000 miles.

One last word. While we had undoubtedly experienced a glorious holiday, and were more than charmed with what we had seen during our travels, yet deep down in my heart on our return, I was conscious of a real feeling of gratitude that, notwithstanding my early aspirations, fortune had decreed that my lines should be cast in the pleasant places of the Home Land, rather than in the Tropics.

PORT ELIZABETH.

The City of Port Elizabeth is by no means badly off for beauty spots within its boundaries. Some of these spots have been bestowed on us by nature and lavished on us by a far-sighted Government and Municipality. First impressions of any town are particularly important. The approaches by rail or road often leave indelible impressions on the mind. An odd corner or an open space in a busy part of the town can make or mar the impression of that town for ever. If gay and tidy with a few flowering plants, what pleasing impression is at once stamped on the mind of the visitor! If an ugly old hoarding or a paper-littered alley is the first thing that meets the eye of the passenger on passing out of the station or dock gates, the town is damned at once.

So in this city of ours, the idea of creating a garden in the middle of Market Square was a happy and wise one. The neat, well designed walls in rough Sandfontein stone, with copings and paving in beautiful Cradock stone, its lawn of vivid green and flower beds in gorgeous colours, central pool with beautifully coloured water lilies and with rockeries full of interesting plants, all create at once upon the mind of the new arrival by train or boat, that tidy well cared for, prosperous impression, so desirable in the would-be settler, the pensioner seeking a refuge, or the business man seeking a factory site or business This Market Square idea is well backed up by the recently created rockeries in Whites Road, leading up to the Roman Catholic Church, and again higher up on both sides of the steep road which is the principal avenue leading out of the city to the hotel and residential areas. The Whites Road Rockeries have been favourably commented upon out of all proportion to their size and cost of construction, the reason being that they are so conspicuously situated. The effort spent on these gardens has been very well worth while, and an adequate sum for their constant maintenance at a high standard should always be forthcoming. It is earnestly hoped that the idea will be extended in Belmont Terrace along the western and northern boundaries of the Donkin Reserve.

Why are there so many rockeries and so much stone in such a naturally rocky town, is may be asked? The reason for employing these methods of garden architecture are sound and not far to seek. The climate is constantly subject to droughts at any period of the year, and succulent plants are best able to withstand these conditions. Ordinary methods employing the usual run of horticultural subjects need deep soil and constant water, the former entailing high capital costs to create, and the latter, lavish maintenance charges. Rockeries achieve economies in both directions and are, moreover, always attractive, hence their liberal use.

An open space of peculiar drawing power, because of its historical interest and magnificent view of the Bay and Harbour, is Fort Frederick. This, the first stone building to be erected in the Eastern Province, namely, in 1799, has been well cared for, the walls, gateway, powder magazine and quarters are in an excellent state of preservation. Recently the surrounding grounds have been developed and plants typical of the Eastern Province flora established therein.