



THE
JOURNAL
OF THE
KEW GUILD

AN ASSOCIATION OF
MEMBERS OF THE KEW STAFF
PAST AND PRESENT

1946/47 (Published 1948)

LIST OF OFFICERS.

President: 1946—**S. W. McLeod Braggins, A.H.R.H.S.**

1947—**J. Richardson, A.H.R.H.S., F.I.P.A.**

Trustees: **Sir Edward J. Salisbury, C.B.E., D.Sc., Sec. R.S., and
W. M. Campbell, N.D.H., F.I.P.A.**

Hon. Treasurer: **L. Stenning, Royal Botanic Gardens,
197, Kew Road, Kew Surrey.**

(To whom all remittances should be addressed.)

Joint Hon. Secretaries and Editors of Journal **W. M. Campbell and
S. A. Pearce, 197, Kew Road, Kew, Surrey.**

Members of Committee:

Retire 1948

**M. Free, U.S.A.
F. H. Eul, Bexley Heath
T. Sargeant, Ripley
W. H. Barker, Carlisle**

Retire 1950

**G. W. Robinson, Oxford
J. L. Glasheen, Richmond
F. Hawkins, Kenya
Dr. W. B. Turrill, Kew**

Foremen and Student Gardeners:

L. J. MAHON

Retire 1949

**Dr. C. R. Metcalfe, Kew
W. G. Sheat, Kew
W. L. Lavender, Richmond
R. Cameron, U.S.A.**

Retire 1951

**J. Souster, Australia
H. Spooner, Fulham
Dr. F. N. Howes, Kew
A. Osborn, Reading
E. Coward, Sheen**

Women Gardeners:

MISS I. SANDERS

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EDITORIAL

The years 1946 and 1947 have shown a definite improvement in the interest taken in the affairs of the Guild by both members overseas and those resident at home, particularly have the members abroad been anxious to obtain news from home and there has, therefore, been much more correspondence with these members than was customary even before the war. It is, therefore, unfortunate that the interest thus displayed should tend to be damped by the non-appearance of the Journal at the appropriate time, but there is no question whatsoever but that difficulties of printing such publications as ours have definitely increased rather than improved, during the years in question.

The Committee, in their wisdom, agreed that 1946 and 1947 Journals should be incorporated in one, with the earnest hope that with possible improvement in labour difficulties and paper shortage during 1948, the Journal might be produced early the following year. There is undoubtedly a need for the resuscitation of the Annual Dinner, and there is a general feeling that even though this may be arranged, the Annual Tea has proved so popular that this might still be kept as a permanent reminder of happy gatherings spent under war-time conditions. Food problems make the chances of a 1948 Dinner rather remote, but it is hoped that should the Committee decide to embark on this venture, that members will give it the support it deserves.

The need for increased subscriptions to the Jubilee Permanent Security Fund are still as great as ever, and it is hoped that members will endeavour to send along a donation for this purpose, as no matter how small, it will ultimately lead to the objects the Committee have in mind of placing the Guild on a secure and sound financial basis. Members desiring to contribute should send their donations to Mr. L. Stenning, Hon. Treasurer. A further appeal must be made to all members to keep in touch with the Guild, and for those overseas to let us have, from time to time, any items of interest that may be worthy of publication in the Journal.

S. W. McLEOD BRAGGINS, A.H.R.H.S.

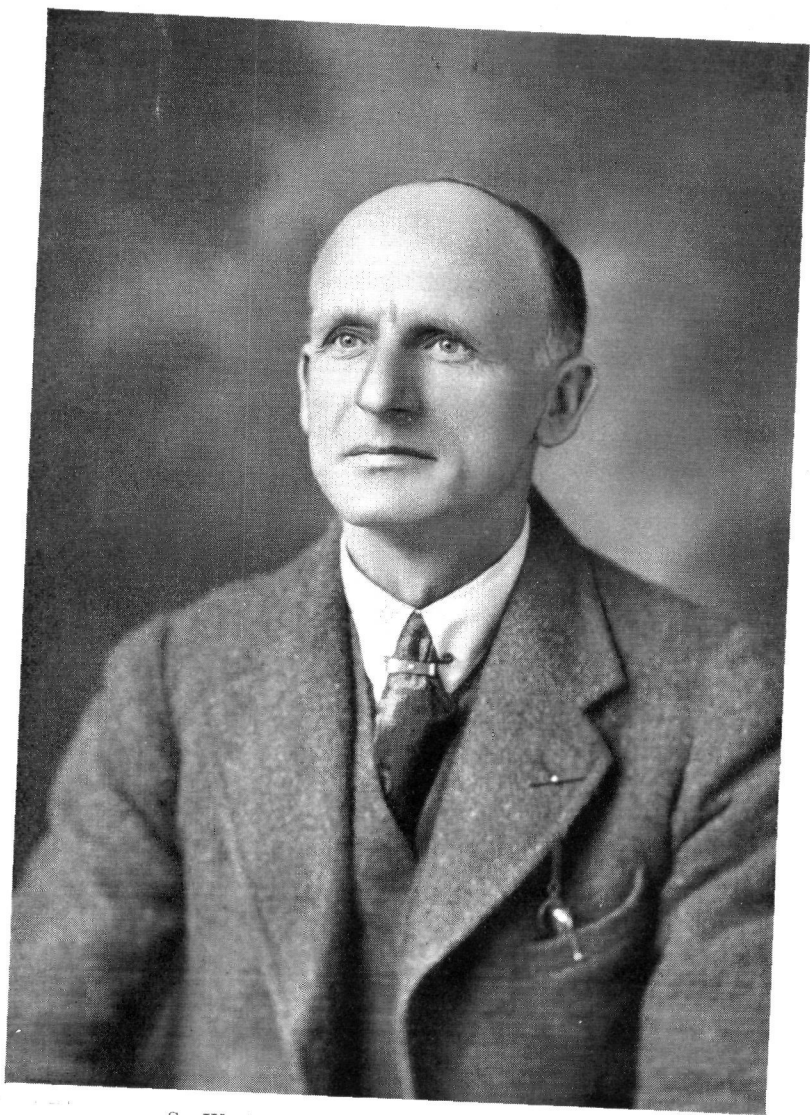
Mr. S. W. McLeod Braggins, President of the Kew Guild during the year 1946-47, was born in 1882 at Banbury, Oxon, where his father was a well-known timber merchant. He was educated at Lochinver, Sutherlandshire, and at Banbury Academy, and commenced his gardening career at Veitch's Nursery at Feltham. After two years he moved to Dobbies' Nursery at Rothesay.

In December, 1905, our President entered Kew as a Student Gardener, being posted to the Temperate House, where after a few months he was promoted to sub-foreman. At this time a great deal of renovation and transplanting was being carried out, and Mr. Braggins, by his energy and skill as a cultivator of plants soon began to attract the attention of his superiors. In November, 1906, a request was received at Kew from Messrs. James Veitch and Sons, for an experienced man to act as their catalogue compiler, and Mr. Braggins was recommended and selected for the post.

After several years experience at the Head Office of the firm, Sir Harry Veitch appointed him Chief of the Landscape Department, where our President's duties consisted of plan drawing and preparing estimates, also the supervision of constructional work.

On the outbreak of the 1914-18 war, Mr. Braggins joined the army, and after being commissioned was posted to France, and was severely wounded in the Battle of the Somme. After a lengthy period in hospital, he was discharged in 1918, and was engaged as a Horticultural Officer to the Imperial War Graves Commission, being posted to Italy, where he was in charge of the British War Cemeteries for three years. It was in 1921 that Mr. Braggins accepted the post offered to him by Sir Cecil Hanbury, as Assistant Superintendent of the famous La Mortola Gardens in North Italy. In 1923 the Superintendent (Mr. J. Benbow) retired owing to ill-health, and Mr. Braggins succeeded him, and proceeded to make an absorbing study of the gardens. Under his supervision, collections of many rare and interesting plants were imported and added to the gardens. In addition, new rockeries were constructed and large groups of succulents planted, which soon became a great feature. One of the greatest improvements was the cutting of a long vista from one end to the other of the gardens, the terraces and margins being planted with a wide variety of trees and shrubs.

In 1935, our President left La Mortola and accepted a post offered to him by Mr. Moffat Smith at Bordighera, and immediately commenced to transform a wilderness into a beautiful garden. For many years, Mr. Braggins' advice and knowledge was in demand in Italy, and in recognition of his services, he received the Italian decoration of *Commendatore*.



S. W. McLEOD BRAGGINS, A.H.R.H.S.

ANNUAL GENERAL MEETING 1946

The Annual General Meeting of the Kew Guild was held in the Iron Room, at Kew, on Saturday, July 20th, 1946, with the President, Mr. A. Blackburn, in the Chair. Some 78 members were present, this being the largest attendance since the pre-war meetings.

The Minutes of the last Annual General Meeting having been approved by the Committee, were taken as read.

Apologies for absence were read from Miss Gertrude Cope and Mr. C. P. Raffill. The Secretaries were requested to send a letter to Mr. Raffill expressing the meeting's regret at his presence in hospital and the sincere wishes of all members for his speedy recovery.

Report of Committee was read and approved.

STATEMENT OF ACCOUNTS

After the Honorary Treasurer had reported on the totals in hand of the various accounts, Mr. C. H. Curtis moved their adoption with a proviso that £40 be invested. This was seconded by Mr. Brooks and passed unanimously.

PRISONERS OF WAR FUND

The Honorary Treasurer reported that as this fund was now closed, the Committee recommended that the balance should be transferred to the Benevolent Fund. On a proposal by Mr. C. R. Stock, seconded by Mr. Braggins, the meeting unanimously agreed that this should be done.

JUBILEE PERMANENT SECURITY FUND

Reporting on this fund the Honorary Treasurer stated that occasional sums were still coming to hand and over £300 had been subscribed. The President suggested that a further appeal might be made to members and the meeting agreed that a second appeal should be sent out with the 1945 Journal, asking for additional funds and stating that a target of £1,000 was aimed at.

ELECTION OF OFFICERS

- A. *President*—Mr. S. W. McLeod Braggins
(proposed by Mr. Sillitoe, seconded by Mr. Eul).
- B. *Hon. Treasurer*—Mr. L. Stenning
(proposed from the Chair (President), seconded by Mr. Jones).

C. *Hon. Secretaries and Editors*—Messrs. Campbell and Pearce (proposed by Mr. C. H. Curtis, seconded by Mr. Spooner)

D. *Members of Committee*—

Mr. G. W. Robinson	to replace	Mr. F. G. Preston
Mr. J. L. Glasheen	„ „	Mr. E. G. Dunk
Mr. F. Hawkins	„ „	Mr. P. Robertshaw
Dr. W. B. Turrill	„ „	Mr. E. Coward

STUDENT GARDENERS' AND WOMEN GARDENERS' REPRESENTATIVE

Mr. Arthur Woodward, proposed by Mr. Boyle and seconded by Mr. Taylor, was elected to represent Student Gardeners, and Miss I. Sanders, proposed by Miss Hudson and seconded by Miss Sharps, was elected as Women Gardeners' representative.

JOURNAL

The Secretary reported that every effort had been made to increase the number of advertisements. This had been successful and over £50 was assured. Apart from several blocks which were outstanding, everything was ready for the printers, and it was hoped that the Journal would be published at an early date.

MUTUAL IMPROVEMENT PRIZES

The Society's prize awarded to Mr. C. Mitchelmore; the Hooker prize awarded to Mr. R. M. Stuart-Brown, and the C. P. Raffill prize awarded to Mr. J. Slater, were presented by the President, who made some well chosen remarks in each case and congratulated the winners.

The President, in a short address, expressed his appreciation at being given the privilege and honour of being President for the year. He expressed the hope that his successor would have an equally easy term of office, to which Mr. Braggins, the President-elect, suitably replied.

ANY OTHER BUSINESS

Captain M. Mason, who left the Gardens to join the services, strongly criticised the system of training at Kew. He was of the opinion that the early morning start combined with the long working conditions were not conducive to his recommending men to apply to come to Kew as Student Gardeners. The speaker, having made no recommendations or constructive suggestions, no comments were made by the meeting or from the Chair to this unusually strong criticism of Kew training.

Mr. Brooks asked what action, if any, had been taken regarding the provision of new and additional laboratory accommodation for Student Gardeners at Kew. The Curator outlined what

had been done in the way of additional equipment, microscopes, etc., which had been obtained, but stated that so far no progress had been made with the provision of additional laboratory and lecture room accommodation.

The President remarked that as the Director was present, it was opportune for him to inform the meeting of his observations.

The Director said that at present it was rather difficult to say at this stage how the training scheme for ex-service personnel would develop and he trusted that suitable action could be taken to obtain further accommodation for laboratory and lecture work. He assured the meeting that he always had the students' welfare at heart and that the matter was under review. He would make every effort to see that improvements were made, once the evidence of what was really required was known.

Mr. C. H. Curtis proposed a vote of thanks to the Officers of the Guild for their work during the year, this was seconded by Mr. A. C. Bartlett. Mr. Campbell, in reply, said that much praise was due to Mr. Cotton who had done so much in preparing the material for the current Guild Journal.

The meeting closed at 3.55 p.m.

KEW GUILD GENERAL ACCOUNT
(for financial year ending December, 1946)

RECEIPTS		EXPENDITURE	
	£ s. d.		£ s. d.
Balance from 1945 account	144 0 3	Envelopes for Journal ...	1 10 0
Annual subscriptions and donations ...	10 0 0	Royal Gardeners' Orphan Fund ...	1 1 0
Life subscriptions ...	6 6 0	Insurance premium on the Proudlock Tennis Cups	7 6
Dividends on £300 3 per cent. New South Wales stock £9 (less £4 Is. income tax) ...	4 19 0	Hon. Treasurer's postages, etc. ...	1 13 6
Dividends on £26 6s. 3d. 3½ per cent. War Stock	18 4	Balance in Bank ...	188 5 7
Dividends on £500 3 per cent. War Savings, Sir A. W. Hill's bequest ...	15 0 0		
Dividends on Jubilee Permanent Security Fund	8 6 6		
Interest on Post Office Savings Bank ...	3 7 6		
	<u>£192 17 7</u>		<u>£192 17 7</u>

CAPITAL ACCOUNT

LIABILITIES		ASSETS	
	£ s. d.		£ s. d.
189 Life Subscribers @ £1 @ half rate ...	94 10 0	£300 3 per cent. New South Wales Stock at par ...	300 0 0
259 Life Subscribers @ £2 @ half rate ...	259 0 0	£26 6s. 3d. 3½ per cent. War Stock @ par ...	26 6 3
76 Life Subscribers @ £3 3s. ...	239 8 0	£500 3 per cent. War Savings, Sir A. W. Hill's bequest ...	500 0 0
Assets exceed Liabilities ..	462 13 10	Valuation of Journals in stock ...	35 10 0
		Valuation of Typewriter .	5 10 0
		Balance in Bank ...	188 5 7
	<u>£1055 11 10</u>		<u>£1055 11 10</u>

WATSON MEMORIAL EDUCATIONAL FUND

RECEIPTS		EXPENDITURE	
	£ s. d.		£ s. d.
Balance from 1945 account	125 12 1	Nil.	
Subscriptions ...	— — —	Balance in Bank ...	132 5 1
Dividends on £100 3½ per cent. War Stock ...	3 10 0		
Interest on Post Office Savings Bank ...	3 3 0		
	<u>£132 5 1</u>		<u>£132 5 1</u>
(Assets £100 3½ per cent. War Stock @ par and Balance in Bank £132 5s. 1d. Liabilities Nil.)			

DUMMER MEMORIAL PRIZE FUND

RECEIPTS	£ s. d.	EXPENDITURE	£ s. d.
Balance from 1945 account	25 13 5	Nil.	
Dividends on £70 Funding Loan	2 16 0	Balance in Bank ...	29 2 6
Interest on Post Office Savings Bank	13 1		
	<u>£29 2 6</u>		<u>£29 2 6</u>
(Assets £70 4 per cent. War Stock @ par and Balance in Bank £29 2s. 6d. Liabilities Nil.)			

MATILDA SMITH MEMORIAL PRIZE FUND

RECEIPTS	£ s. d.	EXPENDITURE	£ s. d.
Balance from 1945 account	19 3 11	Nil.	
Dividends on £50 3 per cent. Savings Bonds ...	1 10 0	Balance in Bank ...	21 3 7
Interest on Post Office Savings Bank	9 8		
	<u>£21 3 7</u>		<u>£21 3 7</u>
(Assets £50 3 per cent. Savings Bonds @ par and Balance at Bank £21 3s. 7d. Liabilities Nil.)			

THE BENEVOLENT FUND

RECEIPTS	£ s. d.	EXPENDITURE	£ s. d.
Balance from 1945 account	101 1 3	Nil.	
Balance from Prisoner of War Fund	43 1 8	Balance in Bank ...	147 13 1
Interest on Post Office Savings Bank	3 10 2		
	<u>£147 13 1</u>		<u>£147 13 1</u>

THE PROUDLOCK PRIZE FUND

RECEIPTS	£ s. d.	EXPENDITURE	£ s. d.
Balance from 1945 account	6 10 2	Nil.	
Dividends on £25 4 per cent. Funding Loan ...	1 0 0	Balance in Bank ...	7 13 6
Interest on Post Office Savings Bank	3 4		
	<u>£7 13 6</u>		<u>£7 13 6</u>
(Assets £25 4 per cent. Funding Loan @ par and Balance in Bank £7 13s. 6d. Liabilities Nil.)			

KEW GUILD JUBILEE PERMANENT SECURITY FUND
DONATIONS FOR 1946

	£	s.	d.
Balance from 1945 account	321	12	5
Harpana	10	0	0
J. E. S. Souster	1	1	0
C. R. Stock (second dona- tion)	1	1	0
C. Jones (second donation)	1	0	0
S. Edmondson	2	6	
G. G. Cook	5	0	0
	<u>£339</u>	<u>16</u>	<u>11</u>

MUTUAL IMPROVEMENT SOCIETY 1945-46

The Annual General Meeting was held at a particularly early date, namely, August 29th, enabling a long season to be arranged. It was decided to hold the meetings on Monday evenings each week, as before the war, instead of on Wednesday evenings.

The officers elected for the season were as follows :—

Chairman	...	...	Mr. W. M. Campbell
Vice-Chairman	...	...	Mr. S. A. Pearce
Hon. Secretary	...	...	Mr. R. M. Stuart Brown
Asst. Hon. Secretary	...	...	Mr. R. Andrews
Committee	...	...	Miss E. V. Paine
			Mr. G. Sivyer
			Mr. C. Mitchelmore

The syllabus was arranged in two separate sessions to allow for possible changes in staff, and the participation of returning ex-Service men in the second session.

WINTER SESSION 1945-46

Sept. 17	Introduction to British Grasses	...	Mr. J. Souster, N.D.H.
„ 24	Reconstruction of Small Park Areas	...	Mr. H. Kruger.
Oct. 1	Debate: Is a sound knowledge of botany essential to a practical gardener?	...	
„ 8	*Annuals	...	Mr. W. L. Lavender.
„ 15	Notes on Plants in House No. 15	...	(Carter's Seed Trial Grounds) Mr. R. Andrews.
„ 22	Herbaceous Borders	...	Mr. R. Holder.
„ 29	*Water Plants	...	Prof. E. J. Salisbury
Nov. 5	Dutch Lights	...	Miss K. Eperon.
„ 12	Vines and Peaches Under Glass	...	Mr. C. Mitchelmore.
„ 19	Roses from the Nurseryman's Point of View	...	Mr. J. Slater.
„ 26	Medicinal Plants Through the Ages	...	Miss S. Morrissey.
Dec. 3	Market Garden Irrigation	...	Mr. G. D. Lockie, N.D.H.
„ 10	*Gardens in the Modern Landscape	...	(Manager to F. A. Secrett) Mr. R. Sudell, F.I.L.A.
„ 17	Pest Control in the Private Garden	...	Mr. R. Parker.
SPRING SESSION 1946			
Jan. 7	Items in Garden Construction	...	Mr. K. Vile.
„ 14	Commercial Propagation of some Herbaceous Perennials	...	Miss E. Fraenkel.
„ 21	Cultivation and Propagation of Tropical Water-lilies	...	Mr. L. Stenning.
„ 28	Mineral Deficiencies	...	Miss L. Wells.
Feb. 5	*Floral Decorations	...	Mrs. Constance Spry
„ 11	Flora of the Society Islands	...	Miss S. Trower.
„ 18	*Glasshouse Construction and Heating	...	Mr. H. E. Wright.
„ 25	Insectivorous Plants	...	(Director, Duncan Tucker, Ltd.) Miss N. Rymer.

Mar.	4	How Our Wild Flowers Were Discovered	Mr. J. Gilmour, M.A.
,,	11	Value of Plants in Human Diet ...	Mr. H. Bird.
,,	25	Plants for the Conservatory ...	Mr. A. Woodward, N.D.H.
Apr.	1	*Horticulture in Denmark *Lantern Lectures.	Mr. G. Mikkelsen.

The Director once again gave us an extremely interesting ecological lecture, this time on "Water Plants." Mr. Gilmour, in his lecture, dealt with the history of botany in this country, and Mr. Stenning and Mr. Pearce each devoted an evening for our instruction.

We were fortunate in securing several visitors to lecture to us, all of whom were enthusiastically received. Mrs. Constance Spry's lecture was especially appreciated.

Out of the remaining 16 lectures given by members it is difficult to pick one or two particularly outstanding ones for mention because all were of exceptional merit. Having elected the Curator as Chairman, we were obliged to show him what we could do; and there were certainly no half measures about it!

The additional prize which the Curator donated, to be known as the "C. P. Raffill Prize," and to be given to the member who gives what is voted to be the best lecture each season, was probably a further stimulation. It was awarded to Mr. J. Slater for his lecture on Roses, while the Society's prize was awarded to Mr. C. Mitchelmore.

The women did their part very well, and I for one, shall be sorry if there are none of them here to take part in next year's proceedings. Altogether, it has been quite a successful season.

R. M. STUART BROWN.

KEW METEOROLOGICAL NOTES, 1946

From December 10th, 1945, to January 11th, 1946, the minimum each night on grass was 32° or below. On January 15th the minimum was 45°, and maximum on January 16th was 55°. On January 18th the minimum was again below freezing, and it froze every night between January 18th and March 13th. The lowest temperature recorded was 9° (in the screen) on the night of February 25th. The maximum day temperature was at or below freezing continuously from January 26th to 30th, and from February 11th to 23rd, except for February 14th and 15th, when it rose to 33°. Except for February 3rd and 4th (40°) and February 9th and 10th (37°), the temperature did not rise above 35° between January 23rd and February 23rd.

Night temperatures remained low until the middle of March when a very rainy period set in. Snow or rain fell on 26 out of the 31 days of March with a total of more than 4½ inches. There were 5° of frost on March 25th and 3° April 10th; apart from this there was no frost after March 17th. April and May day temperatures were fairly normal, the maximum reaching 80° on May 13th and 90° on May 30th. The night temperature did not drop below 40° after May 5th.

1946			Rainfall in Inches	Temperature (Fahr.)	
				Maximum (screen)	Minimum (on grass)
January	...	...	1.44	56°	19°
February	...	...	2.29	57°	20°
March	...	...	1.26	68°	22°
April	...	...	2.13	75°	27°
May	...	...	3.29	70°	32°
June	...	...	2.81	78°	42°
July	...	...	3.04	88°	43°
August	...	...	3.87	83°	43°
September	...	...	3.44	77°	41°
October	...	...	1.46	73°	28°
November	...	...	3.92	66°	33°
December	...	...	1.88	52°	16°
Total Rainfall ...			30.83	—	—

JOHN RICHARDSON, A.H.R.H.S., F.I.P.A.

Our President for 1947-48 was born at Armthwaite, near Carlisle, and received his early horticultural training in private gardens in Cumberland, at Cardew Lodge, near Carlisle, and at Calthwaite Hall Gardens. When the owner of Calthwaite Hall acquired a fresh estate at Brackenburgh Towers, Mr. Richardson became foreman in charge of the new layout of the park and gardens. Realising the necessity of obtaining a wider knowledge of plants, and of horticultural principles generally, he applied to become a Student Gardener at Kew, and entered in October, 1906.

During his stay at Kew he worked in the Decorative and Temperate House Departments, attending the full course of lectures available in those days to students, and at the same time studied land surveying, botany and general horticulture at both Richmond Technical College and Paddington. In March, 1909, Mr. Richardson obtained an appointment in the Parks Department at Swansea under Mr. D. Bliss, where he took charge of the Rock and Botanical Garden at Cwmdonkin Park, and after several months' service there the authorities were so pleased with his work that he was given charge of the park and also of the nursery.

In the first World War he served in the Royal Field Artillery for a period of four years, and upon his demobilisation in 1919 he was appointed to the responsible position of Assistant Superintendent of the Parks Department at Swansea. This department had grown phenomenally during the previous ten years, and vast areas of land had been brought under the control of the Park Superintendent. The extension of the borough boundaries in 1918, coupled with the increased demand for recreation in the years following the war, led to abnormal developments, which included the layout of new parks and recreation grounds. The valuable experience gained in this work stood Mr. Richardson in good stead when in September, 1924, he was appointed Parks Superintendent at Wigan. Such was the high regard in which he was held at Swansea, on leaving the town he was presented by the Town Council with an illuminated resolution in recognition of his valuable services.

Our President did not remain long in Wigan, because in September, 1926, he was successful in obtaining the post of Parks Superintendent to the City of Salford, and so became responsible for an extremely efficient parks system in a very highly industrialised area. For six years Mr. Richardson continued the improvement, more particularly to the recreation facilities, of the city, and on the retirement of Mr. W. W. Pettigrew from the position of Director of Parks, Manchester, Mr. Richardson was appointed in October, 1932, to fill this highly responsible post. For over 15 years he has upheld the very high reputation gained

in his younger days, and there is no doubt that the parks system at Manchester has benefited considerably from the very wide knowledge of horticultural problems that have been dealt with by him before taking over his most important post. The City of Manchester can be justifiably proud of their public parks and open spaces, and despite all the difficulties occasioned by climatic conditions and the carrying out of horticultural work in industrial areas, Mr. Richardson has done a great deal to add increasing beauty to this vast city. A staunch Kewite, always willing to help the young man on his way, Mr. Richardson retires this year, and all will wish him long life and happiness in his well earned rest.

W.M.C., 1947.

THE KEW GUILD ANNUAL REPORT 1947

The Committee have pleasure in submitting the Annual Report for the past year.

The Annual General Meeting was held, as in recent years, in the Iron Room at Kew, on Saturday, July 20th, 1946, with Mr. A. Blackburn, the President, in the Chair. Seventy-eight members were present. The meeting was followed by a tea which was held in the Director's Office Garden, at which over 150 members and guests were present.

The Committee have pleasure in recommending the election of Mr. J. Richardson as President for the ensuing year.

The members of the Committee who are due to retire this year are Miss E. M. Wakefield, Messrs. F. S. Sillitoe, T. R. N. Lothian (Australia), F. G. A. Goldsack and A. J. Brooks. The following nominations to fill the vacancies are submitted for approval: Messrs. J. Souster (Australia), H. Spooner, F. N. Howes, A. Osborn and E. Coward. Representatives of both Foremen and Student Gardeners have still to be elected. The duties of Hon. Treasurer will continue to be carried out by Mr. L. Stenning during the coming year, and Messrs. W. M. Campbell and S. A. Pearce have agreed to continue the joint positions of Secretary and Editor.

The Proudlock Tennis Cup Competitions for 1946 were won by Miss Anne Buller and Mr. H. J. Eaton.

The various funds of the Guild show substantial balances due to the fact that there have been very limited calls upon them during the past few years. The Committee, however, are still anxious to increase the reserve funds of the Guild and it is their desire to again appeal to members to subscribe in order that the Journal can be brought back to pre-war standard. Owing to the printing difficulties experienced in the production of the 1945 Journal, the Committee are of the opinion that the Journals for 1946 and 1947

should be incorporated and that every effort should be made to obtain publication not later than April, 1948. They also recommend that fresh printers be sought, and enquiries are being proceeded with.

The Committee would appreciate the views of members on the desirability of holding the Annual Dinner next year as in pre-war years.

The Committee regret that so far no improvements have been possible in the conditions and facilities governing the training of Students at Kew, although the matter is still under consideration.

Since the publication of the 1945 Journal we regret to record the death of Messrs. W. H. Judd, H. Wood, E. Hewitson, A. Beard, W. W. Pettigrew, Captain A. H. Pettigrew and W. J. Bean.

F. S. SILLITOE,
Chairman of Committee, August 23rd, 1947.

ANNUAL GENERAL MEETING 1947

The Annual General Meeting of the Guild was held in the Lecture Room, Kew, on Saturday, August 23rd, 1947, at 3 p.m., when Mr. Sillitoe took the Chair in the absence of Mr. Braggins, the President, who at that time was away in Italy. Over 60 members were present.

The Secretary read the notice convening the meeting, and followed with the Minutes of the 1946 meeting, and after discussion it was agreed that they be accepted as read.

The Annual Report of the Committee, copies of which had been circulated, were approved by the meeting on the proposal of Mr. Stock, seconded by Mr. Lavender. The Treasurer's Report was read and approved and members stressed the necessity for building up the Jubilee Fund to the original figure of £500. It was agreed that appeals should still be continued for special subscriptions for this purpose, and after considerable discussion Mr. Curtis moved the adoption of the accounts, which motion was seconded by Mr. Cotton.

The election of President for 1947-48 then took place, and on the proposal of Mr. Sillitoe, with strong support from Mr. Stock, Mr. J. Richardson was unanimously elected. Several members supported the proposal and expressed their appreciation of the admirable work Mr. Richardson had done on behalf of Kew. After his election Mr. Richardson expressed his thanks for what he felt was a great honour conferred on him, and signified his desire to carry out his duties in the best interests of the Guild.

The members of the Committee due to retire were Miss E. M. Wakefield, Messrs. F. S. Sillitoe, T. R. N. Lothian (Australia), F. G. A. Goldsack and A. J. Brooks, and the vacancies were filled by Messrs. J. Souster (Australia), H. Spooner, F. N. Howes, A. Osborn and E. Coward. Mr. T. Jackson was elected representative for the Student Gardeners, and Miss I. Sanders for the Women Gardeners.

Mr. Stenning was unanimously elected as Treasurer for the coming year, and Messrs. Campbell and Pearce as Joint Secretaries and Editors. In accepting the position they appealed to members to furnish suitable articles and photographs for use in the next Journal. The printing difficulties experienced in the production of the 1945 Journal were explained, and after a long debate it was agreed that the 1946 and 1947 Journals be amalgamated and that this joint issue be available for publication in April, 1948. The recommendation made that a notice calling the Annual General Meeting should be sent out with the Journal was adopted.

The Chairman then presented the Hooker prize to Mr. C. J. Wilmott, the Mutual Improvement Society's prize to Mr. G. E. Brown, and the C. P. Raffill prize to Mr. J. O. Taylor, a Student from New Zealand.

Before the meeting closed the question of suitable accommodation both for training and also for residence for the Students, was raised by several members, and the Secretaries explained that though laboratory accommodation was not likely to be improved during the next year or two, the Ministry hoped to maintain the present hostel in Kew Gardens Road. The question of a suitable memorial for the Kewites who fell in the recent war was put forward by Mr. McElroy, and it was felt that this could very well be incorporated with the memorial commemorating those who fell in the 1914-18 war. The Committee expressed the hope that it might be possible in 1948 to again hold the Annual Dinner, and this matter was left in the hands of the Committee.

The meeting closed at 4.15 p.m., when members adjourned to the Director's Office Garden to take tea with their friends and guests of the afternoon. Though rather sultry, it was a perfect summer's day and the tables set in the open air were well patronised. Some 150 people sat down to tea, and it is interesting to record that on this occasion both the numbers of staff and old Kewites attending were far greater than in any previous year. The Director and Lady Salisbury were present, and members were again pleased to welcome Mr. and Mrs. H. N. Ridley.

After a pleasant tea, coupled with the renewal of old friendships, the party began to disperse about 5.15 p.m., and though the majority were able to get away in time, a few of the lingerers were caught in the very heavy thunderstorm which followed shortly afterwards.

THE MUTUAL IMPROVEMENT SOCIETY 1946-47

At the Annual General Meeting held in the Iron Room on September 15th, 1946, the following were elected to hold office:—

Chairman	...	...	Mr. L. Stenning
Vice-Chairman	...	...	Mr. G. H. Preston
Hon. Secretary	...	...	Mr. C. Wilmott
Asst. Hon. Secretary	...	...	Mr. G. E. Brown
Members of Committee			Mr. C. E. Armstrong
			Mr. C. H. Mitchelmore
			Mr. J. O. Horne

A syllabus consisting of 23 lectures was arranged, and of these, 17 were given by Student Gardeners. Throughout the session a high standard was maintained and many of the lectures were illustrated by lantern slides.

The Director's lecture on "The effect of environment on plants," was greatly appreciated, and it is hoped that the society will be privileged to hear further lectures by Sir Edward on similar subjects.

Mr. Raffill gave another of his interesting talks on "Gardens in the Riviera," and the comprehensive collection of coloured lantern slides were greatly enjoyed.

An instructive lantern lecture on the genus *Lilium* was given by Mr. S. A. Pearce, and Dr. C. R. Metcalfe gave an enlightening talk, with the aid of lantern slides, on the "Role of the Microscope in Botanical Identification."

The Society is greatly indebted to Mr. J. C. Van Balen, Director of the Public Parks, Johannesburg, for his lecture on the Parks and Gardens of Johannesburg and Pretoria, whilst the several thousand feet of coloured film portrayed the wonderful floral beauty and layout of the various gardens, parks and zoo.

It is pleasing to note that the total attendance was 800, with an average of 34 per lecture; 42 individual members taking part in discussions.

PRIZES

The Hooker prize, presented each year by the Director, was awarded to Mr. C. Wilmott for his work as Hon. Secretary. The Society's prize went to Mr. G. E. Brown for service in the interests of the Society. The C. P. Raffill prize, presented by the Curator to the member giving the best paper of the session, was awarded to Mr. J. Taylor.

SUMMER TRIPS

In view of the arrangements made by the Surrey W.A.E.C. for trips to various horticultural establishments, only three outings were arranged by the Society. Two Sunday trips were well supported and an enjoyable time was spent at Cambridge Botanic Gardens, and also at Exbury Garden, Southampton. The one Saturday afternoon outing to Messrs. Engelmanns' Nursery was most instructive and greatly enjoyed by the few members who made the trip.

C. J. MITCHELMORE
(for the Hon. Secretary).

SYLLABUS FOR 1946 AND 1947

1946			
Oct.	14	*Lilies	S. A. Pearce.
"	21	Orchids	J. Lancaster.
"	28	*Autumn Colour	F. Hebden.
Nov.	4	Carnations	A. Woodward.
"	11	Pruning Top Fruit	R. Parker.
"	18	Some Public Gardens in Favour of Climates	J. Hingston.
"	25	*Gardens in the Riviera	C. P. Raffill.
Dec.	2	Raising Stock for Bedding	C. Wilmot.
"	9	Chrysanthemums	C. Armstrong.
"	16	*Role of the Microscope in Botanical Identification	Dr. C. R. Metcalfe.
1947			
Jan.	6	The Effect of Environment on Plants	Sir Edward J. Salisbury.
"	13	Tree Surgery	I. Taylor.
"	20	Plants of India and Burma	E. Storey.
"	27	*Some Aspects of the Parks of S. Africa	J. C. van Balen.
Feb.	3	Cropping of Dutch Lights	R. E. Straughan.
"	10	Floral Design	W. Davenport.
"	17	Maintenance of Bowling Greens	T. Garwood.
"	24	Cultivation of Mushrooms	F. Senogles.
Mar.	3	Planning and Making a Garden on a Clay Soil	G. Brown
"	10	Cultivation of Lilies in Pots	I. Boyle.
"	17	Factors Influencing Fruit Production	M. E. Baker.
"	31	*Cultivation of Rhododendrons	C. Mitchelmore.

*Lantern Lectures.

THE ROYAL BOTANIC GARDENS LAWN TENNIS
CLUB, 1947

The past season has been a successful one, although the number of new members did not come up to expectations; the attendance therefore was not as good as it might have been.

The weather was particularly good and only on a few occasions throughout the summer did rain interfere with play. The season commenced the first Saturday in May and continued until the second week in October; normally play ceases the end of September, but with the exceptionally dry autumn it was possible to prolong the season.

There were only eight entries for the Proudlock Tennis Cup which was won this year by C. Foat, who defeated S. A. Pearce in the final after a very keen and closely contested game, while the winner of the Ladies' Tennis Cup was Mrs. E. W. Milne-Redhead, who defeated Mrs. F. A. Ballard.

The cups were presented by our President, Sir Edward Salisbury, at the Annual Dance held on January 9th, 1948.

A very enjoyable match was played against the R.H.S. Gardens, Wisley, on July 30th, which was very closely contested. It ended in a win for Kew by six matches to three. We wish to thank all those, particularly the ladies, who so kindly helped in providing refreshments after the match, and on the numerous other occasions throughout the season.

The return match which was to have taken place at Wisley had to be cancelled owing to the difficulty in raising a team.

G. H. PRESTON, Hon. Secretary.

WEDDING BELLS

Leonard G. Riley to Miss Margaret Reed, of Margravine Gardens, Barons Court, London, at the Leaside United Church of Canada, Toronto, Ontario, on July 12th, 1946.

Charles J. Collins to Miss Doris Mabel Tilney, at St. Lawrence Church, Little Stanmore, Edgware, Middlesex, on July 20th, 1946.

Mr. Geoffrey B. Brown to Miss Audrey M. Henning, at the Parish Church, Fleetwood, Lancashire, on Saturday, October 26th, 1946.

Mr. John A. H. Scott to Miss Elizabeth L. Macpherson-Marshall, at Chichester Registry Office, on October 19th, 1946.

PERSONAL

Mr. F. G. Preston, V.M.H., A.H.R.H.S., for many years Superintendent of the University Botanic Garden, Cambridge, retired on September 30th, 1947. Mr. and Mrs. Preston are continuing to reside in Cambridge, and all members of the Guild will join us in wishing them many happy years of retirement.

Mr. R. W. Younger has been appointed to succeed Mr. F. G. Preston as Superintendent of the University Botanic Garden at Cambridge. Mr. Younger left Kew in October, 1933, to take up an appointment in Chile. He returned to England in 1939, and has held several appointments including Superintendent of the Flower Garden at Wisley, and also Horticultural Officer to Kent W.A.C.

Mr. G. H. Banks, A.H.R.H.S., retired from his duties as Curator of the Botanic Garden, Glasgow, in September, 1947. Mr. Banks, who left Kew in March, 1906, was a prominent figure in horticultural circles, and during his long service at Glasgow, he maintained a high standard of cultivation. We tender our very best wishes to him in his retirement.

Mr. John Douglas, D.Inst.P.A., has been appointed as the new Curator at Glasgow in succession to Mr. Banks. For a number of years Mr. Douglas has been Superintendent of the Parks and Gardens Department, Clacton-on-Sea.

Mr. Gordon R. Groves, who left Kew in 1937, and was later Curator of the Botanic Gardens, British Guiana, returned to England early in 1946, and obtained the appointment of Horticultural Secretary of the Holland (Lincolnshire) County Branch of the National Farmers' Union, with headquarters at Spalding. Mr. Groves, who was appointed from some 60 applicants, took up his duties on June 1st, 1946.

Mr. N. J. Prockter, who since leaving Kew in November, 1937, has held appointments with Messrs. J. Cheal and Sons, and Messrs. Webb and Sons, is now Assistant Editor of "Amateur Gardening."

Mr. John MacCartan, N.D.H., who was appointed Curator, Royal Botanic Gardens, Port of Spain, Trinidad, in succession to Mr. R. E. Dean, resigned from this post in 1946 and returned to England. Mr. MacCartan is now engaged as Superintendent of the Parks and Gardens Dept., Botanical Gardens, Rhyl, North Wales.

Mr. H. J. Kruger, D.Inst.P.A., who left Kew in 1946 to take up the appointment of Technical Assistant in the Parks Department at Beckenham, is now Assistant Parks Superintendent at Wallasey.

Mr. A. Woodward, N.D.H., D.Inst.P.A., has been appointed to succeed Mr. Kruger as Technical Assistant at Beckenham. Mr. Woodward came to Kew as a Student Gardener in 1945.

Mr. L. G. Riley who left Kew in July, 1939, to take up a position as an exchange student at the Niagara Parks Commission, Niagara Falls, is now Assistant Arboriculturist to the Department of Highways of the Province of Ontario. During the war, Mr. Riley served in the Royal Canadian Air Force, serving overseas as a warrant-officer navigator.

Mr. G. E. Brown, N.D.H., has been appointed Lecturer in Decorative Horticulture at the Swanley Horticultural Institute, Kent. Mr. Brown left Kew to take up his new appointment on September 30th, 1947.

Mr. F. Glover, Senior Inspector (Horticulture), Ministry of Agriculture and Fisheries, was awarded the O.B.E. in the 1946 Birthday Honours.

Mr. F. W. Thorns, who left Kew in 1928, is now Director of Parks, Recreation and Beaches Department, Durban, South Africa.

Mr. H. F. Werner has been appointed Curator of the National Botanic Gardens, Kirstenbosch, in succession to Mr. F. W. Thorns. Mr. Werner was at Kew from 1941 to 1943, and also had experience at John Innes Horticultural Institution, Merton, and in the Blackpool and Manchester Parks Department.

Mr. A. Findlay-Gunn is now Chief Railway Horticulturist in South Africa, being responsible for all horticultural works connected with the State Railways.

Mr. M. Baker has been appointed Horticulturist at the Imperial Chemical Industries, Ltd., Jealotts' Hill Research Station, Maidenhead. Mr. Baker took up his new appointment on 1st November, 1947.

Mr. W. G. Sheat has been appointed by the Ministry of Transport as Chief Officer in charge of the beautification of the trunk roads of Britain. Prior to this appointment Mr. Sheat had been engaged in an advisory capacity on airfield construction and camouflage, with the Air Ministry.

Mr. G. J. Leith, for a number of years general foreman to the Paddington Borough Council, has been appointed Assistant Superintendent of Parks to the Borough of Twickenham. Mr. Leith has been followed at Paddington by another Kewite, Mr. F. J. Hebden.

Mr. P. W. Mansell has taken up an appointment as Propagator with the Kingston-on-Thames Borough Council.

Mr. F. G. Cousins has retired from his appointment as Superintendent of Parks at Torquay. We take this opportunity on behalf of all Guild members to wish Mr. and Mrs. Cousins every happiness in their retirement.

Mr. Kenneth McCreadie has been appointed to succeed Mr. Cousins as Superintendent of Parks at Torquay. Mr. McCreadie left Kew in February, 1929, to commence his municipal career under the late W. W. Pettigrew at Manchester. Later he was appointed Assistant Superintendent of Parks at Bournemouth, and after nine years service at this popular resort, he was appointed Parks Superintendent at Hove.

Mr. C. H. A. Robson, who left Kew in May, 1934, is now Horticultural Superintendent to the Hampshire Council, with headquarters in Winchester. Mr. Robson is in charge of the planting and maintenance of all trees and shrubs used for beautifying the roads within the county.

Honour to Mr. F. G. Preston, V.M.H.

As a kindly gesture and a recognition of his long service as Superintendent of the Cambridge Botanic Garden, the Chancellor and Senate have conferred upon Mr. Preston the honorary degree of Master of Arts.

Mr. C. J. Mitchelmore has been appointed Assistant Horticultural Instructor at the Lancashire County Institute of Agriculture.

Mr. J. J. Boyle has been appointed Propagator Gardener at the Bermondsey Borough Nursery, Longfield, near Fawkham, Kent.

Mr. Geoffrey Corbett, who was formerly with the Department of Agriculture, Reduit, Mauritius, is now Tobacco Expert to the Department of Agriculture at Nicosia, Cyprus.

Mr. R. E. Straughan has been appointed Assistant Horticultural Instructor to the Derbyshire County Council.

Mr. F. L. Squibbs is now Seed Production Officer in Cyprus. Mr. Squibbs, who left Kew in March, 1924, was previously Agricultural Officer, Gold Coast, an appointment he vacated in 1945 to take up his present post.

Mr. D. Dawson has been appointed Landscape Draughtsman in the Parks Department at Wembley. Since leaving Kew in June, 1944, Mr. Dawson has had experience in the Parks Departments of Cardiff and Harrow respectively.

We offer congratulations to the following to whom the Council of the Royal Horticultural Society awarded the Associateship of Honour in 1946: Mr. W. Nemes, M.B.E., Director of Parks, Cardiff; Mr. G. W. Robinson, Curator, University Botanic Garden, Oxford; Mr. J. Richardson, Director of Parks, Manchester.

We also congratulate Mr. R. L. Harrow, V.M.H., on receiving the Veitch Memorial Medal from the Royal Horticulture Society in 1946 for his general services to horticulture, and also for his work while Director of the Royal Horticultural Society's Gardens at Wisley.

Mr. Philip Clarke, N.D.H., who left Kew in 1945 to take up an appointment as Assistant Horticultural Officer with the Surrey County Council, has been appointed as an Advisory Officer in the National Advisory Service.

We congratulate the following, to whom the Council of the Royal Horticultural Society awarded the Associateship of Honour in 1947: Mr. A. C. Bartlett, who for many years has served on the staff of the "Gardeners' Chronicle"; and Mr. F. G. Cousins, late Superintendent of Parks, Torquay.

Mr. W. J. Jennings, for over 42 years Head Gardener at Napsbury Asylum, St. Albans, retired in September, 1947. Mr. and Mrs. Jennings are continuing to reside in St. Albans, and on behalf of all Guild members, we wish them every happiness in retirement.

KEW METEOROLOGICAL NOTES, 1947

Snow fell on 20 days during the first three months of the year. In March, snow or rain fell on 23 days out of the 31. The greatest snowfall on one day was on February 8th, equalling 0.56 inches of rain.

Between May 29th and June 3rd, the daily maxima were 88°, 90°, 85°, 90°, 93°, 96°, but by June 5th the maximum dropped to 64°. There was another hot period at the end of July, and in August the maximum was continuously 79° or above between the 12th and the 29th, reaching 89° or above between 15th and 18th. The first half of October had daily maxima between 65° and 73°, and only 0.27 inches of rain fell between September 23rd and November 7th.

1947			Rainfall in Inches	Temperature (Fahr.)	
				Maximum (screen)	Minimum (on grass)
January	...	...	1.39	55°	15°
February	...	...	1.21	45°	9°
March	...	...	4.61	58°	26°
April	...	...	1.73	73°	29°
May	...	...	1.39	90°	38°
June	...	...	2.80	96°	41°
July	...	...	1.99	89°	45°
August	...	...	0.43	91°	46°
September	...	...	1.18	85°	35°
October	...	...	0.14	73°	30°
November	...	...	1.08	63°	22°
December	...	...	2.36	56°	20°
Total Rainfall ...			20.31	—	—

NOTES AND GLEANINGS

During 1946, the total number of visitors admitted to the gardens was 1,567,954. This is an increase of 23,742 on the previous year.

The greatest monthly attendance was in April with 389,782, and the lowest in December with 13,425. The highest daily attendance was 45,506 on April 19th (Good Friday), and the lowest 21 on February 26th. Highest Sunday attendance was on April 21st (Easter Sunday) with 42,619 visitors, and the least on December 8th with 282.

Also of interest is that 29,537 prams and 2,184 invalid chairs were admitted during the year.

The consumption of river water during 1946 was very low in comparison with other years. In fact, it was little more than half the average yearly consumption.

During the year 16,038,000 gallons was used, and the highest monthly total was 2,530,000 gallons during May. The lowest was 607,000 gallons for December.

During 1946, the number of separate consignments of seeds and living plants, etc., received at Kew was 473, which is still a very low figure compared with pre-war years.

The number of packets of seeds distributed was well up to average. Altogether 5,324 packets of seeds of Herbaceous and Alpine plants and 2,992 packets of seeds of trees and shrubs were sent out.

Information has now been received from the Royal Air Force Missing, Research and Enquiry Service, that Sergeant F. G. Selby, who lost his life in an air attack on Germany in December, 1943, is buried in the Evangelical Cemetery at Cloppenburg, a village 20 miles south of the town of Oldenburg, in Germany. An obituary notice reporting the death of Sergeant Selby was published in the Journal for 1944.

Serious losses continue among the older trees at Kew and during the winter of 1946-47, seventeen trees had to be removed owing to their dangerous condition. It is regrettable that the number included 12 of the very large beeches, which have for many years been one of the features of the Arboretum.

Unfortunately, many of these fine trees seem to have reached their allotted age, and more trees will by force of circumstances have to be removed as they become a source of danger. It is

suggested that the severe drought experienced during 1921 may have caused the decline of many of the trees. If this is so, the drought of 1947 may have still more serious repercussions.

The number of visitors to the Gardens continues to increase and during 1947, 1,620,960 persons were admitted. This is an increase of 53,000 on the previous year. The highest monthly attendance was May with 417,922, and the lowest was February with 7,366.

The greatest daily attendance was on Whit Monday, May 26th, with 79,638, and the lowest daily attendance on December 1st, with only five visitors.

The highest Sunday attendance was 62,149 on May 11th, and the lowest 138 on February 2nd.

During the year 33,270 prams and 1,633 invalid chairs were admitted.

Reconstruction of one of the Fernery pits has been completed and work is proceeding on internal alterations to the Filmy Fern House. The old system of glass cases is being abolished and the benches and stone removed.

Rockery formations are being built, and it is hoped that the collection, which is being added to, will be seen to better advantage when planted in prepared pockets. Double roof-glass is being provided instead of cases.

The outside painting of the Pagoda has been carried out during the autumn. This work has been long overdue, owing to the war and restrictions on work of this type.

A further section of the north-east corner of the Rock Garden has been rebuilt during the autumn. Larger blocks of sandstone similar to that used in the central portion have been used for the work. The large pockets and increased area has greatly improved the general appearance of this section, which now matches other sections completed before the war.

Weather conditions in 1947 were the exact reverse to those of 1946. One of the most severe wintery spells experienced for many years was followed by a very fine and dry summer, the drought continuing into the autumn months and resulted in a substantial increase in the annual consumption of river water used in the Gardens for watering purposes. Some 28,934,000 gallons were used, the highest monthly total being in August with 5,862,000 gallons, and the lowest in February, 224,000 gallons.

Her Majesty the Queen presented to Kew the South African succulents and other plants, which were collected during the Royal tour in the Union of South Africa.

The collection, which comprises many species of *Aloe*, *Cotyledon*, *Crassula*, *Euphorbia*, *Gasteria*, *Haworthia*, *Encephalartos* and *Pelargonium*, arrived in excellent condition.

In the near future, it is hoped that the plants will be on view to the general public in one of the Succulent Houses.

A collection of some 200 South African succulent plants, presented by the South African Institute of Park Administration, were received at Kew in December, 1947. This valuable presentation, which arrived in quite good condition will, when established, prove most useful and help to refurnish the South African Succulent House next season.

BEQUEST TO THE KEW GUILD

News of the sudden death of William H. Judd, one of the most distinguished Kewites in the United States, came as a great shock to his many friends, both at home and abroad. He will be sadly missed at the Arnold Arboretum, and particularly by fellow Kewites in the States, for he had filled the post of Honorary Secretary and Treasurer to the Association of Kew Gardeners in America for many years, regularly recording the activities of the Association in the Kew Guild Journal.

That Mr. Judd held the Kew Guild in high esteem and had the welfare of Kewites at heart, is well known, and all members of the Guild will learn with gratitude that in his will he indicated a bequest in favour of the Kew Guild to the sum of \$880.56 (£217 19s.) to be used for the general purposes of the Guild.

An obituary notice and photograph appear in this issue.

THE ASSOCIATION OF KEW GARDENERS IN AMERICA

The Massachusetts Horticultural Society was once again in 1946 able to return to the Mechanics' Building in Boston for its Diamond Jubilee Spring Flower Show, held from March 18 to 23 inclusive. During the past three previous years, owing to the war, the Society was compelled to hold its Spring Show at the Horticultural Hall, where lack of space prevented any sizeable exhibits, and moreover prohibited the visitors from viewing those on display with any degree of comfort. The spacious halls at Mechanics' Building gave scope for much larger displays, enabling the public more facility to enjoy them. Now the war had ended people were awaiting this event with added enthusiasm, as was evidenced by the largest number of visitors in the history of the Massachusetts Society—a total of 120,000. Fortunately, every day was sunny and warm, March 22 being 71°. Chartered buses brought in garden club members from all over Massachusetts, as well as from adjoining States.

One outstanding exhibit among several in the main hall was a California hillside garden featuring Acacias. A balcony on three sides of this hall gives seating accommodation to several hundred visitors, and from which the soft music of an organ adds to the pleasure of the visit.

Naturally, on occasions such as this an opportunity arises for Kewites to gather together, and on Saturday, March 23rd, the Twenty-ninth Annual Meeting of the Association of Kew Gardeners was held at the Minerva Hotel, at 6.30 p.m. A joint meeting with the New York members was not possible as yet, hotel accommodation being almost impossible at New York or Boston. Consequently, we were dependent on local members. Fortunately several were able to be present, including two of the oldest members of the Guild, Mr. Robert Cameron, who left Kew in 1887, and Mr. Robert Barton, three years later. The youngest member, with his wife, was Mr. Alfred Fordham, who left in 1937. Others present, whose days at Kew ranged from 1900 to 1923, were Mr. F. Lazenby, Mr. James Brown, Mr. E. K. Thomas, Mr. and Mrs. J. Ellis, Mr. W. H. Judd and Mr. J. A. Semple.

After dinner an informal meeting was held when recollections of Sir William Thistleton Dyer, Sir David Prain, Sir Arthur Hill, George Nicholson and William Watson were discussed with benign reverence and of what their guidance had meant to us in respective order, and we wonder if Kew in the future will be able to continue to supply the United States of America with men of the same calibre who emigrated here in the past and left an indelible record, not only for themselves, but an undying testimonial for the training that only Kew can give.

WILLIAM H. JUDD, 1946.

VOCATIONAL TRAINING SCHEME

The Ministry of Agriculture's Vocational Training Scheme for ex-servicemen commenced at Kew on October 1st, 1946, when some twenty trainees took up their duties. The scheme provides for a one year course of both practical and theoretical training, and so concentrated is the amount of study that the syllabus covered is very nearly equal to the two year course of study taken by the former Student Gardeners.

The majority of lectures are given during working hours and the classroom work is amplified by regular demonstrations on horticultural practice. A half day a week is allowed the trainees for what is known as "free study," in which they are able to browse among the plant collections or to study in the Gardens' Library. In order that the whole of the men should not be away from their work at one time, they are divided into two groups which study on Wednesdays and Thursdays. Visits to scientific horticultural headquarters are arranged, and nurseries, market gardens, and even large private gardens, have been visited, thereby providing the opportunity for the students to keep abreast with the advancement made in all sections of horticultural work.

To enable every trainee to gain as wide a knowledge as possible of the various departments, a block system of changes from one department to another is provided for, and in this way men move every three months. By this method all trainees are given the opportunity of serving both under glass and out of doors. The intake of trainees is arranged for the 1st April and the 1st October each year, thereby allowing an overlap of men when the time comes for the oldest group to leave. At the end of the year a number of the most promising men are afforded the opportunity of staying a second year and becoming Student Gardeners, a most important point when the welfare of the collections is to be considered.

It is anticipated that the scheme will continue until 1950, after which date it is hoped to revert to the old method of training with Student Gardeners partaking in a two year course.

EXTRACTS FROM LETTERS

"It is over 30 years ago since I first visited Kew Gardens. At that time I was lucky enough to be a frequent visitor. At all times and seasons the beauty there enchanted me, and always, I marvelled at the magnitude of the work involved in keeping the beauty so continuous.

"The happy constant visiting passed all too quickly, and for many years the Gardens were, to me, just a glorious memory.

"During tulip time of this present year, I was again in the (to me) enchanted place. I had been almost afraid to make the visit, for of late years, blindness has almost overtaken me, but I came to Kew, and to my great joy, under my son's guidance, was once again happy at what I could still just see.

"If you have a magazine or journal of any kind, I should feel happy if you would publish the enclosed verse, which I wrote after my last visit.

"I should like, too, to render my thanks to all those of you, who work so untiringly to achieve such continual loveliness."

KEW GARDENS

Kew, in the magic of her Springtime dress,
In myriad shades of verdant loveliness.
With bloom of chestnut quiv'ring on the trees,
And starry hawthorn scenting every breeze.
With sombre green of rhododendron leaf,
O'erhung with luscious blossoms, while beneath
Group after group of lovely tulips grow
In billow'd masses—not in rigid row.
Snow drift of white, pale gleam of yellow gold,
Shell pink and scarlet, blood red, black, they hold
Aloft their stately chalic'd cups, and say,
"People of England, we give thanks to-day,
For tears, and sweat, and blood, in Holland's cause,
That freed her from the Nazi tyrant's claws."

(From Mrs. Lily Gubb, 29/7/46.)

Colonel W. B. Little, D.S.O., O.B.E., M.C., writes from the Middle East:—

"Please note that I left the Lord Wandsworth College on the outbreak of the last war, having been recalled to the Army.

"Since the conclusion of hostilities I have been serving with the Ministry of Supply, Disposals Division, in the Middle East, and am still so engaged."

"I should like to convey my congratulations to your President—Arthur Blackburn—whom I well recollect coming to Kew whilst I was there.

"With reference to the training at Kew, I am more than pleased to hear of the improvement in the facilities of learning. Kewites going abroad must feel they want a more 'Universal Diploma' to compete with those trained in the Colonies or Dominions." (From W. J. Down, Adelaide, South Australia.)

REMINISCENCES OF AN OLD KEWITE

The Secretaries of the Kew Guild have invited me to write an article for the *Journal* describing my career since leaving Kew. I gladly accept the honour, but must say at the outset that compared with some of my contemporaries, it will be somewhat commonplace. Permit me to mention Dawe of Uganda, etc., with whom I was privileged to live in three different "digs"; Brown, his colleague, with whom I walked to Covent Garden Market a day or two before Christmas. Paterson, Horton and Long, I worked with in the Temperate House. I have pleasant recollections of Osborn, under whom I worked in the Ferneries, and many others who have carved their names on the scroll of fame to the lasting honour and glory of Kew.

I left Kew in March, 1902, after having led a campaign against compulsory vaccination, which made me feel somewhat of a rebel—Mr. Watson warned me that I should find it a hard and uphill task to fight against the Director—and went to work in the extensive market garden nurseries of Messrs. Thos. Rochford & Sons, Ltd., Broxbourne, whilst waiting my turn on a long list of applicants for service in the London Parks.

When the short days arrived, I found myself having to work two or three hours every day (6 a.m. to 6 p.m.) by the light of a couple of candles in bottles. This made me feel distressed, so I put my name on Messrs. Veitch's register and took the first post that came my way, which was as Kitchen Garden Foreman at Wallhampton Park, Lymington, Hants.

Here I stayed until one day I had a telegram asking me to attend a meeting of the Parks Committee, County Hall, Spring Gardens, and was accepted as a Probationer Gardener, starting at the bottom of the ladder in Battersea Park. This was in July, and the Park was alive with school children. Everywhere was littered with paper in which the children had brought their food for the day, and in comparison with the rural beauty of an English park and private garden, it was a very discouraging sight and made me long for the county I had just left.

Every Friday evening I made my way to the Public Library to see the "Gardeners' Chronicle" and looked down the list of advertisements, answering any that appealed to me. I had, however, a letter from the Chief Officer in answer to a question *re* promotion, in which he said that with really skilled intelligent men, the chances of promotion were very good!! I had the South Kensington 1st Class Certificate for Botany, and the Kew Certificates, together with the R.H.S. General Examinations 3rd and 2nd, and when the first Public Parks Examination was held, I was the only Gardener in Battersea Park to get a 1st Class Certificate. I went before the Committee several times for promotion, but always, length of service seemed to have first consideration, so at the end of nine years I went back into private

service as Head Gardener to the Earl of Sheffield, better known as the Hon. Ralph Stanley, Chairman of the London School Board, and later Lord Stanley of Alderley.

These gardens were then being brought up to a high degree of perfection. During the summer months they were thrown open to the public for several Saturday afternoons (when the family were not in residence) in July, August and September, which meant everywhere having to look at its best, the lawns mown, and verges cut and all the paths swept and the borders gay with flowers.

Teas were provided in the grounds so that folk from a distance could spend the afternoon there, and from 7 to 9 a band was engaged to play for dancing on the lawns. His Lordship was a notable Liberal and close friend of the then Prime Minister, Mr. Asquith, who was a frequent visitor together with many Cabinet Ministers, including Mr. Churchill, who was a distant relative. This meant, of course, a further call on the gardens being attractive, and the house well supplied with choice flowers, fruit and vegetables.

World War No. 1, however, put an end to this, and in a short while a staff of 14, with help from estate labourers in the summer months, was reduced to two old men, two Land Army girls, and myself.

Mowing, which had been a full time job for two men and a horse, was cut down to what could be done in half a day, and here the chauffeur was called in to help. Miles of grass verges skirting the paths in the two walled-in gardens were ploughed in, long rows of espalier fences for fruit trees were removed in order to facilitate the use of the plough, using the path as a headland.

Lord Sheffield had 17 grandchildren, most of whom spent the war years with their grandparents, together with nurses, etc. There was often a house party of over 80.

The Tenants' Hall and rooms adjoining were used as a hospital, with accommodation for 50 wounded soldiers, together with matron and resident nurses.

The long flower borders in the formal garden, and rose beds were nearly all used for the cultivation of vegetables. Most of the lawns were ploughed up and cropped with potatoes three years in succession.

Lord Sheffield died in 1924, by which time owing to a much reduced income, we were marketing the surplus produce. His successor had to find £85,000 death duty. The new Lord, however, had held a post as Governor of Victoria, and had formed contact with many business men who made him their representative in London. Consequently, he could meet a lot of his expenses

out of income, so that while carrying on the marketing, with a motor mower we increased the mowing, which added much to the amenity of the ornamental grounds, and the flower beds in the large four acre formal garden. The kitchen garden, however, robbed of its verges and flower borders running parallel with the paths lost much of its former attractions.

The gardens were thrown open again, but no band played, and gradually visitors were fewer and fewer.

In 1931 his lordship died, and his successor had to find a further £65,000 death duty. We had to increase the market gardening effort, and I got his Lordship to visit the Cheshire School of Agriculture, and other marketing establishments, with the result that I was allowed to order two new commercial greenhouses, 100ft. by 24ft. 6in., and a propagating house 100ft. by 14ft. This made a big difference to the output. We already had a horse-drawn plough and cultivator, and added to this we purchased a 5 h.p. Rototiller, cleared hundreds of yards of yew hedges over 100 years old with clipped designs 20 feet high, several evergreen oaks, and a huge oak tree in the centre of the garden were uprooted and the roots dropped in huge graves, after they had been sawn off, as they were too massive to move away. Several acres of meadowland adjoining the walled-in gardens were enclosed and cropped with fruit and vegetables. Labour, of course, was a problem, but we had a gardening schoolmaster in the village running a school garden. I got him to send along his most promising boys, and I started them off by employing them in their school holidays and Saturday mornings. They were a great asset. Two evenings a week they would help bunching flowers, etc., until dusk, ready for loading on the lorry every Friday and Saturday morning. In the early Spring the woods and parts of the lawn were white with Snowdrops. Boys gathered these in the day time, and my wife and I bunched them in the evening by artificial light. Large tracts of woodland and land boundaries had naturalised Daffodils and Narcissi in variety. These were all gathered in the daytime and bunched at night. The bath and every available large container, including several old-fashioned hip baths, were filled to capacity, and the bunches stood in water all night. Huge quantities of vegetables and fruit were marketed at prices compared with to-day a dozen then were sold at the price per unit now. Many flowers in bunches of 12 were sold at per dozen bunches as per single bunch. The same applied to vegetables. Lettuces, for instance, were good going at 1s. per dozen wholesale.

In 1938 the estate was sold lock, stock and barrel to a London syndicate. I left on September 29th when it changed hands, and was for over three years Head Gardener at Tabley House, Knutsford. Here, by the way, I would mention that the last Lord de Tabley, writing to a friend in his book, "The Flora of

Cheshire," said he had engaged a gardener from Kew, and Sir William Thiselton Dyer had drawn up a suggestion for making a garden at a cost of £10,000 which, of course, was never carried out. The walled-in kitchen garden was nearly 400 years old.

From here I went to Moor Court, Oakamoor, and had not been there long before I was asked by some of the locals if I had met Mr. Skan whilst at Kew, and I found that as a youth, Skan had been employed here and married a lady from Oakamoor at Oakamoor Church. This fascinated me greatly as I had pleasant memories of Skan and the pains he took to help young gardeners with their British botany. Later one of his daughters stayed on holiday with an aunt, and I sold her tomatoes each week from Moor Court gardens.

With the increased old age pension, I could see my way to retire. The Earl of Shrewsbury kindly placed living accommodation here at my disposal. I have a small walled-in garden, small greenhouse and cold frames. From my windows, I can see his Lordship's gardeners at work in the walled-in garden and greenhouses, and am very happily settled after 54 years regular employment, most of it strenuous.

J. A. SUMMERFIELD.

RAMBLINGS OF AN OLD KEWITE

Food Production under the London County Council, 1940-1945.

In October, 1945, I resigned the pensionable post as Head of the Horticultural Branch, London County Council, a position I had established with the support of the Chief Officer, from a senior staff of two to nine horticultural officers in six years.

When, early in 1940 the Council decided to increase food production, I was invited to attend the meetings of the Committee, which was subsequently called the Farming Operations Committee. The policy having been decided, the task of organising the administration and advisory work was delegated to me.

It may not be generally known, but in normal times a public body is not allowed to produce more food crops than it can utilise in its own establishments, but in 1940, special emergency powers were invoked whereby County Councils were encouraged to produce food to their utmost capacity.

The London County Council's farms and gardens are situated in many counties, but most are concentrated in Essex, Kent, Herts, Bucks, Surrey and Middlesex.

Prior to the outbreak of war, these farms, etc., served three main purposes :—

- (a) Production of food for internal consumption.
- (b) Educational and instructional.
- (c) Vocational (pupils, rehabilitation, and mental patients).

My first aim was to ensure co-ordination, and I visited all establishments, more than 350 in number, in order to elaborate the Council's intentions and to ascertain the demands and resources of each establishment. An idea of the immensity of this task may be obtained if I explain that this necessitated visiting no less than 18 counties.

The reason I mention this is to explain why I decided to resign and return to Malaya. The extensive duties then delegated to me would doubtless be curtailed, if not entirely removed, after the war. This made me regard the future with some trepidation. I had served more than five years in a big job, and although the difficulties were many and varied, the work was most interesting. Therefore the comparative limitation of the post-war activities of the Council, so far as food production was concerned, did not appeal to me; despite the fact that I was to be promoted to Principal. The drawback to this position was that I would become an administrator, delegating the most interesting work to others and spend most of my time seated at a desk and attending conferences, committees, etc.

In the words of a former well-known radio comedian, "What would you do, chum?"

Quite apart from this, the thought of returning to Malaya and assisting in the rehabilitation of the country appealed to me—then there was adventure!!! How often, when in England, the remoteness of my surroundings made me recall life in Malaya. The cry of a strange bird, the whirr of wings, and the fitting shape of an insect. All these things are sentient of the East. The Goddess of Adventure seldom smiles on those who stay at home. For them a badly cooked meal, a bathroom without a lock, a singer in the night, are merely annoying incidents, yet for those who have resided in strange lands they are transformed into adventures.

As I have already stated, during the war years my duties were extended to include the supervision of the farming, market gardening and fruit growing operations, which necessitated much travelling. In addition, I was responsible for breaking up several

hundred acres of land in the vicinity of London and elsewhere and planting cereal and root crops, and also the management of nurseries and glasshouses wherein some 15 tons of tomatoes were grown annually. In fact, fields of waving oats within sound of Bow Bells!!

Besides attending the Farming Operations Committee meetings as Agri-Horticultural Advisor, and general advisory work in the Home Counties and beyond, I controlled a large staff of workmen, including market gardeners and foresters, in several counties, and advised other local authorities on market gardening, farming and forestry. No less than 16,000 allotments were opened in London, and I spent many week-ends visiting and advising holders.

Among the counties visited regularly in connection with my duties were all the Home Counties and Suffolk, Cambridgeshire, Oxfordshire, Lincolnshire and Leicestershire. Altogether there were more than 250 establishments, including hospitals, schools, institutions and large estates that had been taken over to house evacuated schools.

Despite the many week-ends away from home and travelling under war conditions, I enjoyed the work and soon realised that it would be difficult to settle down to spending a great deal of my time on administrative work.

Well, a family discussion elicited the knowledge that we were all of the same mind, i.e., a return to warmer climes. Whereupon I offered my services for agricultural rehabilitation and development work in the Colonial Agricultural Service, and was subsequently invited to return here in connection with the above work.

First of all, I had to attend a War Office Selection Board, then an Officer's Training Course. I was subsequently given a passage to Malaya in a troopship, with the rank of Major on the Civil Affairs Staff of the British Military Administration, Malaya.

I travelled to Bombay in 18 days, then to Madras (48 hours train journey), and after two weeks, onwards to Malaya.

MALAYA REVISITED

My first impression on disembarking was that compared with India, which I first visited in 1919, Malaya is an exceedingly clean and tidy country. I was also struck with the number of Malays working in the docks. Formerly Chinese and Indians did this work, and I could not help feeling that the Malay had awakened to the fact that he must take a more active part in the affairs of his country. If this is so, the occupation, as regrettable

as it was, has accomplished some good. After a month or two in different parts of the country I have seen no reason to alter that opinion.

It may interest you to know that although the streets of Singapore were not paved with gold on my arrival, they were littered with Japanese notes of various denominations. Throughout Malaya these notes may be seen alongside roads, etc., and children are doing keen business in the sale of this currency. I have even bought a \$1,000 note in the street for a few cents.

The Japanese apparently were, as might be expected, most inconsistent in their treatment of the Tamil and Chinese labour forces; they did everything possible to make the more wealthy Asiatics "lose face" by directing them to menial tasks. I understand that every Sunday morning the latter, including doctors, lawyers, business men, etc., who carried on their normal tasks during the week, were marched two or three miles to dig and plant crops. It sometimes happened that a man found his former messenger or servant was foreman, and occasionally the treatment he received from him added to his sufferings.

Wherever one goes throughout Malaya acres of tapioca can be seen, the large tuberous roots of which constituted almost the principal diet of the people. Naturally enough the word "tapioca" is anathema to most people to-day.

To proceed with my journey. On my arrival in Kuala Lumpur I telephoned the Director of Agriculture, who replied that he had been expecting me for weeks. Whereupon he sent his car to fetch me, and within half an hour I was sitting at a desk near the place I had occupied 19 years ago.

Since the re-occupation the senior staff, formerly 50, had consisted of a Director and four or five Agricultural Officers, only two of whom had previously worked in Malaya. The Director, recently from Jamaica, I soon discovered was a man of quick decisions and certainly a "live wire." He promptly told me he had no time to delegate work, but would leave me to decide which among the many jobs needed immediate attention.

The Public Gardens and Experimental Plantations were in an appalling condition, so I organised a small force of labourers and commenced to clear and re-shape some 300 acres of land. Thick undergrowth, 10 feet and more in height, had replaced beds of flowering shrubs, etc., and, the bane of Eastern agriculturists,alang grass, four to five feet high, had established itself everywhere.

At this time the other members of the staff were attending meetings in connection with a big drive to grow more food. Within ten days of my arrival the Director told me that although

I was doing a great job, he had a very important one which he said he was certain I could do in view of my war-time experience and also because of my local knowledge. This was to organise an agricultural propaganda campaign and write leaflets, design posters, etc., and generally advise the Food Production Board on agricultural and allied matters. Well, for the last three months I have managed to give daily directions regarding the rehabilitation work, and for some 14 hours daily, seven days a week, I have been writing, preparing talks, leaflets, booklets, slogans, posters, etc., and visiting various places in connection with the "Grow More Food" Campaign which is now well under way. Copies of some of my leaflets, etc., are enclosed, all of which I have had translated into Chinese, Malay and Tamil. In addition, I have edited and prepared articles for the Press, and contributed weekly notes on food production for important newspapers, and judged at Agricultural Shows 100 miles away. Loud-speaker vans, radio, aeroplanes and street boys have been employed, and the demands for seeds and plants, advice, etc., are not easy to cope with, but fortunately the staff has been augmented by the arrival of four or five Agricultural Officers. We are all acting in various capacities, and during the last three months I have acted as Agricultural Economist, Senior Agriculturalist Publicity Officer, and Agriculturalist in charge Gardens and Plantations, all at the same time.

I live in an Officers' Mess on army rations, there being insufficient native-grown food in the country and very little has yet entered from adjoining countries. Another old Kewite, Ewart, is I understand, doing useful work in the neighbourhood of Singapore, whilst Ritchings is wrestling with the jungle which has encroached on the Waterfall Gardens, Penang.

One concluding observation—other old Kewites have referred in the pages of the "Journal" to the importance that adaptability plays in the careers of men who settle abroad. Whereas in Britain—quite erroneously—the man of 30 is considered incapable of exercising judgment or taking an important job, abroad he is expected, indeed instructed, to carry out the most varied and important tasks and he must never refuse. The reverse is the case in Britain, although a gradual change is taking place and these same young men are securing important positions, but without the dire results envisaged by many. I write with some feeling on this matter, as on returning to a not unimportant position in Britain, I frequently encountered trouble for taking action without consulting the chief—in view of my experience abroad—on what I regarded as minor matters. It was useless to explain that I had been accustomed to using my own initiative no matter how difficult the task and that I was prepared to take full responsibility for my actions. Moreover, my selection for the position had been largely determined by the wide experience I had been able to gain abroad whilst wrestling with many diverse problems.

Similar, although I doubt as exhaustive experience, could be gained in Britain if young men were given the opportunity. Failures there will be, but whereas the faults of the younger men may be more easily corrected, it is not easy to alter the opinions of the more mature men.

Just before leaving England, I had the good fortune to renew acquaintance with several Kewites of my day, 1923-27. The opportunity provided at the Conference of the Institute of Park Administration, at which I represented the L.C.C., and the Garden Party at Kew, was unique. I was fortunate on these two occasions to meet many old friends. It is therefore appropriate that I should commend to the Committee of the Kew Guild the suggestion that the Garden Party should be additional to the Dinner during May. I suggest that July or August be chosen, although late spring will always, to my mind, be the best time to visit Kew. What better setting could one have than the lovely lawns of Kew for chatting with Kewites from many lands!

F. S. BANFIELD,
April, 1946.

THE GLORY OF A GARDEN

LOCAL "KEW IN MINIATURE"

"Kew in miniature" is how visitors describe a private garden in the Ville au Roi, Guernsey, Channel Islands. It belongs to Mr. W. A. Warry, of Duhallow, and he is justifiably proud of what he has achieved during the past two years.

It is half-a-century since Mr. Warry left Kew Gardens, but what he learned there has never left him, and his garden is one of the most beautiful in the island.

His reputation has spread beyond Guernsey, and when I enjoyed a stroll on the neat lawns and beneath grand specimens of apple trees, Mr. Warry told me how many visitors, as well as residents, call and ask to be shown the colourful borders and lovely trees.

Mr. Warry is so particular about cleanliness that he defies anyone to find a weed. "I will offer £100 to anyone who can," he challenged as he told me of the work he has put into this, his favourite hobby.

The kitchen garden is just as interesting and equally well kept, every kind of vegetable being produced in season.

It is difficult to think that anyone could be so mean as to steal his flowers or fruit, but thefts do occur.

Mr. Warry has cultivated 200 varieties of roses, many of which are planted in the front of the house.

Recently, a thief—obviously an expert by the way he cut the blooms—stole all the flowers.

(Reprinted from the "Guernsey Evening Press," July 18th, 1947.)

THE GARDENS' BELL

After 70 years of service, the Gardens' bell, which all Kewites will remember without difficulty, crashed from its moorings in the large Lime tree near to No. 15 house, during a gale on the afternoon of August 28th, 1946.

The bell, which was mounted between the twin trunks of the Lime, was undamaged, but the wooden pulley wheel was badly smashed. The crash was due to the iron stays, which were fixed above the bell to prevent the twin trunks from spreading, breaking.

Except for the war years, when ringing of bells was prohibited, the garden bell had been rung every day throughout the years, except Christmas Day, the only day of the year that the Gardens are closed to the public.

Now after a break of 14 months, the bell has been re-erected in another tree nearer to the Azalea Garden (a more central point) and is again in service. It is worth noting that the bell no longer rings at 6.30 a.m., the work of the Gardens now commencing at 8 a.m. throughout the year.

RAILWAY HORTICULTURAL ACTIVITIES IN SOUTH AFRICA

By A. FINDLAY GUNN, F.Inst.P.A., Chief Railway Horticulturist

Circumstances have favoured me in placing me in one of the most interesting horticultural posts in this country. The post I refer to is that of Railway Horticulturist in the Department of Railways and Harbours. The work which falls to this post is the subject of this short address.

As far back as the year 1894, the late Sir Thomas Price, then General Manager of the Cape Government Railways, initiated a scheme to beautify the railway stations of the Cape Colony, and

to encourage the growing of flowers and planting of trees, by railwaymen in their gardens. Prizes were offered yearly by the Administration, to assist and encourage horticulture amongst railway employees.

This excellent scheme begun at the Cape, was in time introduced into the other Provinces, and I think I am correct in saying that Natal, the Garden Colony, was last to adopt the scheme in 1908.

The year 1910 saw the formidable task of bringing the three large railway administrations (consisting of the Cape Government, Natal Government, and Central South African Railways) under one control. Railway construction was pushed steadily ahead and a railway horticulturist was appointed. Mr. Firth, who filled the post, had a heavy task to undertake in coping with the growing Administration. Railway nurseries were established at Canada Junction, Inchanga, and Bloemfontein, with smaller horticultural establishments at Kimberley and Kroonstad.

The South African Railways has always done a great deal to encourage horticulture, and in 1914 we learn that the Administration was offering prizes for the best kept stations and the best kept employees' gardens, amounting to £250. In the same year the Administration distributed 70,000 young trees, exclusive of shrubs and plants, for planting out on railway properties.

Thirty odd years ago, Railway Horticultural Shows were fashionable events in Johannesburg and Cape Town. The flower shows were the mecca for gardening enthusiasts from far and wide. We learn competition was keen, entries high, and fashionable crowds thronged the exhibition halls. Old familiar names flit across the years, names unknown and may be forgotten to many of us here to-day, but some may recall the Hon. Henry Burton and Mrs. Burton, the Hon. H. Juta and Mrs. Juta, the Administrator of the Cape, the Hon. Mr. de Waal and Mrs. de Waal, Sir William Dalrymple, Sir Thomas Price and Lady Price, Mr. William Hoy, later becoming Sir William Hoy, Lady Lionel Phillips, and many others. At these Railway Flower Shows fine displays of aloes and succulent plants were exhibited by Dr. Pole Evans, then Chief of the Division of Botany—those were the days before we had so many succulent enthusiasts in the field—the new vogue for collecting succulents only came in during the last 20 years. All this may sound irrelevant in mentioning names of men and women, but in their day, in their time, they did much to stimulate an interest in the cultivation of flowers and plants in this country.

The present railway horticulturist has no share in this past history, that was the work of the pioneers.

Now to turn to present-day events.

During the first few years of the war, railway horticulture work was in abeyance. The maintenance of the nurseries was carried on by the gardening staff, but little in the way of development was undertaken.

I was appointed early last year to my present post, and was asked by the Railway Administration to draw up a programme of work for post-war development. After completing a tour of inspection of nurseries and principal railway premises, I was able to submit a report on the conditions prevailing and to recommend where improvements could be made.

As a result, the Railway Administration has drawn up its programme of work which will operate over a number of years, indicating where desirable, the priority to be given to various objectives.

The Railway Horticultural Section falls under the office of Works and Estates in the General Manager's Department. And the scope of the horticulturists' activities can be considered under these headings :—

1. The carrying out of expansion schemes in the national interest and for the benefit of the community as a whole.
2. The encouragement and application in beautifying and maintaining railway stations, main stopping places, airports, dockyards, employees' quarters, etc.
3. To ensure and maintain an adequate supply of trained personnel for all sections of railway horticultural work.

The Administration has discharged the first of these three functions by establishing a horticultural section under its control and direction, and by financing it from its own vote. It has established a seat of education for the training of its employees known as the Central Railway Training Institute, at Esselen Park. This scheme, whereby future railway employees will be trained, should benefit the community as a whole. A temporary nursery has been opened at Esselen Park for growing trees and shrubs, for planting out in the gardens and grounds at the Institute. In time it is hoped that a permanent nursery will be established to meet the requirements of this centre.

The establishment of three national airports are under the control of the Administration, and arrangements are already in hand to serve the particular needs of this great national project.

Under the second heading, *i.e.*, encouragement in beautifying railway stations and properties, a programme has been prepared and preference has been given to the beautifying of main line stations, and in particular, main stopping and watering stations. The present-day policy of the Administration whereby the railway architectural and horticultural sections work in collaboration, is a

wise one. By this co-operation stations will receive technical consideration combined with aesthetic planning, and the value of such architectural and landscape features to the community will be realised. To-day the successful erection of a station and the lay-out of the adjoining grounds, represents an achievement of the greatest civic importance.

The same applies to harbours, dockyards and airports, these are the " Gateways " of this land, and everything possible to make them attractive as well as useful is being done.

To encourage gardening and tidiness amongst the railway staff at stations, prizes are offered for the best kept stations, and the Lady Duncan Trophy has been the means of infusing enthusiasm amongst our staff throughout the country.

Railway embankments and emplacements are being planted to prevent denudation and erosion.

Thousands of fruit trees have been grown in the nurseries for distribution by our Health and Welfare Department to gangers and lower wage groups—every encouragement and assistance is given in planting these fruit trees in the gardens of employees.

Under my third heading reference was made for the need of training personnel in all sections of railway horticultural work.

The efficient operation of any system requires a staff of workers with varied skill, training and experience.

The Railway Horticultural Section will be needing men to fill vacant positions. The question arises, where are we to look for trained men? Are we to train men to meet modern needs? We need horticulturists for our major schemes, men who can conduct and direct activities; maintenance personnel, and a host of others. We do not want gardeners with a rudimentary knowledge of gardening, we need practical men who have devoted their lives to the study of this science, who know its problems and who are progressive in their outlook. (My problem is to supply them.) We will be on the outlook for men with originality of thought, men with newer and broader ideas, men who can help us to get away from the monotonous regularity that binds so many of us.

I might mention here that when our railway employees pass through our training institute at Esselen Park, an opportunity will be given to those men who will be the future station masters, gangers, etc., to learn a little about gardening. The talks which will be given will be practical and realistic, such as the use of tools and equipment, etc. They will not be overburdened with horticultural technique—if they show initiative, they will be able to give expression to this on their station and in their gardens.

FUTURE

Railway horticulture is all set for a phenomenal expansion in the years ahead. Work is being re-orientated to meet post-war needs.

Mention has already been made of the great national airports to be constructed under the Railway Administration. These will have to be laid out and maintained; the Railway Training Institute at Esselen Park is to be developed; railway hotels, when erected, have to be catered for, dockyards laid out and beautified. And on the economic side, land will be available for the production of vegetables, the problem of erosion of railway lands will be tackled. These are but a few of the jobs that are scheduled for the future.

While speaking of the future, I wonder how many of us here to-day realise that it is in our power to play a really vital part in the future horticultural development of this country.

In this changing world, we in this southern part of the great African Continent may find we are becoming isolated from the rest of the world. We are not on any of the great ocean-going or air-going trade routes. Our future visitors will be mostly of the business kind, they will alight from their aircraft and hurry to the great business centres. Trade agreements will be signed and these men of speed will return to their own lands. We down here will have to hold out great attractions to induce wanderers from other latitudes to visit us. The material is here in our midst. Our flora and fauna are special to, and characteristic of South Africa. It is up to us to do all in our power to create more and more botanic gardens, public parks, nature reserves and other centres of beauty. With greater specialisation in industrial jobs, and increasing leisure, greater numbers of our own people will visit these areas to enjoy their restfulness and beauty; and people in other lands will hear of this floral grandeur and will come specially to see our wonders. As gardeners we are the trustees of this land of botanical promise and it is up to us to see that this "*botanicorum paradisus*," as Linneaus, in his happy descriptive way, called the Cape, is made known to the rest of the world.

And now having told you a little of what the Horticultural Section of the Railway Administration has done in the past, what it is at present doing, and what is promised for the future, I am certain that the work that lies ahead will be tackled on the same broad lines. Railway horticulture looks forward to the future with confidence.

(Re-printed from the "Journal of The Institute of Park Administration, South Africa.")

AN AMERICAN SOLDIER IN AN ENGLISH GARDEN

BY LIEUT. GEORGE A. GRIER

No, I'm not the only Yank that has strolled the beaten pathways of England's never-to-be-forgotten and beautiful gardens. But I'm lucky as, and probably even luckier than, the majority of American lads, in that the army has afforded me, through its extensive information and education programmes, an opportunity to study the English version of gardening, their many adaptable species of plant life, and the conditions favourable and unfavourable to the growth of plants. Most of our work has been done by observing at the Royal Botanic Gardens, Kew, Richmond, Surrey, England. Our associations in these world-famous gardens have led to innumerable discussions with some of England's foremost botanists and landscape architects.

It is difficult to select a subject that would be most interesting for discussion in the way of a comparison of the English and American garden, but when I was wandering through the rose garden at Kew with a United States Department of Agriculture representative on leave from one of the university centres, he expounded on the magnificent growth shown by the roses. His amazement has opened a road for my thought. Just why has the Englishman been able to surpass the American in the construction of a beautiful landscape?

Your first answer to such a question nine times out of ten would be, "climate." And you would be right in a moderate sense of the word, yet there are numerous other reasons far more important in the success of an Englishman's garden. I believe it is best understood by beginning with "tradition . . . and the love gained thereof." In order to gain the fullest meaning of "tradition," it is better to add a little touch of history behind our English garden. That our English allies have plenty of!

Prior to the Tudor period (15th century) the knowledge of gardening had been derived from monastic writings, which best describe the gardens of the monks as "enclosures," shaded walkways, with mention of simple fishponds and thick yew hedges bordering an orchard or vineyard. The Rose was developed for religious purposes, while Violets, Lilies and Poppies had their value already extended in the medicinal lines. In the 14th and 15th and 16th centuries, tenants asserting rights as small farmers, along with the noblemen around London, cultivated gardens of their own and gave development to the arbour, labyrinth and fountains.

The Tudor clan introduced the topiary aspect to the gardens, and the Elizabethan era brought birth to the formal flower gardens, which replaced the beds of coloured sands (called "knottes") of varied geometrical design. Also at this time the

terrace sprang into prominence. It is known that the Lilacs, Mock Oranges, Peonies, Jessamines and Clematises were favourites of this period. No garden was without Tulips.

James I. attempted development of the Mulberry for silk, and also during his reign the cut flower trade came into existence as a valuable art of interior decoration. With the accession of Charles II. and the Restoration period, an invitation was made to Le Notre, famed Versailles stylist, to visit England, and from this period on gradually the French style seeped in. It is characterised by "acres" of formal lawns, straight paths and avenues, woodland groves enclosed by hedges, all of which prominently displayed marble figures, pillars and sundials.

William and Mary introduced the Dutch character found in the English garden of to-day. The trend was towards the ridiculous and extravagant topiary uses which early in the 18th century paved the way for a change to "naturalistic tendencies" in the evolution of gardening. In the remaining half of the 18th century the old slogan, "Nature abhors a straight line," gained a favourable following. The growth in popularity of American shrubbery (Deutzias, Weigelas, Wistarias, Spiræas, Barberies and Veronicas) likewise was notable of this time. Up until the end of the 19th century the decorative art was in its advancing stages, and at the close of the 19th century England's gardening experts were literally battling between the aspects of the wild gardens (a promotion to the rock gardens) and a return to the Elizabethan formality. The past few years have been successful in tremendous research development, and to-day the gardeners with their "boy apprentices," their "improvers" and their "students," are scaling the gardens of yesterday for better and more formidable ideas.

With this smattering of history has grown the most beautiful and expensive gardens and landscape in the world. With it there has been born a naturalness unknown to most of the outer worlds—the old hedgerows of Osage, Holly, Yew, Hornbeam and Beech that are a sample of the peacefulness of the winding English country road; the magnificent and lofty splendours of its spreading Oaks, Limes and Planes that command the countryside or stately streets of London; the rich carpets of green that cover hundreds of parks and cricket grounds—grass whose roots have upheld generation upon generation of Sunday picnics and styled matches, and finally, the clambering vines that bedeck the old brick or gray stone walls of the famed country house or castle, add a hush of admired beauty. To understand these roving slides of English nature it is almost necessary to live with them, and a glimpse is unforgettable.

Yes, there is tradition—tradition it is neatly to clip the hedgerow each year or to replace an aging oak. To the Englishman the garden behind his house or the two-by-four plot encasing his

front door and surrounded by a private hedge and a bed of chrysanthemums is his own bit of "country." Those who haven't the soil in which to caress a seed into a prize-winning specimen are afforded the chance to carry on their naturalistic study at the neighbouring park garden, or at Royal botanic organisations such as Kew Gardens. Indeed, tradition has been carried forth as a number one step in England's Hit Parade of gardens.

But can we blame an Englishman's success on traditional habits alone? Hardly! There are those who have not inherited tradition as reason for their gardening stamina. Nearly every Englishman considers America as a fast-moving world, too much of a madhouse to appreciate the beauty of any ideas (this impression they have acquired from three years of Yankee intrusion). Therefore, as a comeback, a few have told me that theirs is a pure love of gardening. It occupies their time and slows the English world down to a livable and lovable one.

England is favoured with the warm currents of the Gulf Stream, and even though it is of the same latitude as the Hudson Bay, it enjoys winters of Mississippi or Louisiana. Hardly ever is there a lasting snow, and more commonly the January is one of penetrating dampness—dampness in the way of a near-freezing fog. Nor are the summers adaptable to too much swimming; 70 to 80 degrees seems to be a fair average, though the sun does occasionally peep through the haze long enough to push the thermometers to the 90 mark. If there were a song, "Neither Too Hot nor Too Cold," it could be sung while dangling one's feet in rhythm over the side of an English lily pond. There are thousands of "hardy" specimens in England that would suffer exposure in the cold of the northern United States, but the majority of trees and shrubs of North America can find England quite a favourable home.

There is never a shortage of moisture in England. This explains the rich foliage and excellent growth of the plant life. The frosting period is usually quite short, and the ground never gathers in frost such as it does in America. It is, therefore, not uncommon to see ploughing and spading being done in the dead of winter. All this seems to be summed up thus: A fairly early spring, with excellent displays of flowers in April and May in evidence; a moist and cool summer, which carries through plant growth to the fullest and defines retainment of colour; a wet and late fall season which affords the country late and lasting displays of flowers; and, finally, a mild winter season, which rarely will cause a setback or killing quite common in America. There is never the bright sunlight that we in America witness day in and day out, but seemingly there is enough not to curtail the value of the full bloom or growth.

There are probably many more comments we could make favouring the English garden. Probably we should give praise to the system of "working students," who use ten years of their early life to learn gardening from infancy and who later aspire to a superintendent's or head gardener's position in a private garden, one of the public parks or serving under the jurisdiction of the Ministry of Agriculture. Here enters the element of skill that is carried to the garden through experienced hands. In my travels through some twenty-odd gardens throughout England, I have yet to find one gardener who is working for the money involved. The few shillings received daily do not classify it as one of the highest paid jobs. At Kew, for instance, the ladder which an apprentice must climb via the "improver," and "the student gardener" to a "foremanship," and thence to an "assistant curator" is one of many years of hard work. At the completion of a cycle such as this, years of experience are certain to insure a continued success in English gardening and especially in the large private and public gardens where many of the students finally settle down.

It is entirely possible that I am to be mistaken as an English convert. It is not my intention to belittle the American gardens or give all the praise to the British. There are many gardens in the United States that will easily surpass the English gardens in beauty. But my one observation has been the enthusiasm and interest shown by the English public in the attendance and participation in the Royal Horticultural Society shows (the society has a membership of approximately 25,000), in the individual flower and vegetable gardens either in front of the homes or in one of the plots assigned in a public park during the war, and in the splendid upkeep of the century-old gardens despite the effects and hardships encountered during the Battle of Britain in 1940, and bombings of later years. An American needs only visit our ally to become entangled in the beauty of its land. Even could he not see, the "proud gardeners" would, as a result of their enthusiasm, send him back to America thinking in the terms of a beautiful landscape.

—Reprinted from the "American Nurseryman."

FIRST IMPRESSIONS OF WESTERN AUSTRALIAN FLORA

Howea Belmoreana is doubtless an admirable plant, but when a gardener, *en route* from England to Western Australia, has been at sea with no other visible vegetation but a few pots of this palm, he very naturally looks forward to botanising among a more extensive flora. When he does land, it is with something of a shock that he finds how few of the plants he can name, even among those in general cultivation, yet bad as his position may

seem at first, he will soon begin to recognise a plant here and there, or at least to distinguish the genus, and gradually his self-confidence will return. It is during these first weeks that he will count himself fortunate if he has had experience in a botanical collection of plants, especially temperate plants. In fact, in his first semi-dazed condition, he may easily imagine he has come to a gigantic Temperate House, the sort of place he may have dreamed about where space is no object, where sun-loving plants get all the light they want, and where trees can lift their heads without incurring a painfully necessary periodic decapitation.

He will recognise his first plant as the ship approaches Fremantle. Three miles from land, there is no mistaking the habit of the Norfolk Island Pine, *Araucaria excelsa*, which is commonly planted near the coast. The whorls of branches are more widely spaced than in the Temperate House plant, and it rises in formal symmetry to some 80 feet or more. Then as the ship enters the mouth of the Swan River, *Washingtonia filifera* will be seen raising its head above the port buildings.

From Fremantle to Perth is a drive of some ten miles, chiefly through residential suburbs which are colourful even though it be mid-winter. Roses still linger in the gardens, along with late flowers of Hibiscus, Abutilon and Malvaviscus, and the Poinsettias are at their brightest. The Coral tree, *Erythrina indica*, now nearly leafless, bears the first of its scarlet flowers, and *Plumbago capensis*, several varieties of *Lantana Camara*, and the smaller *L. Sellowiana* are flowering in the hedges. The earliest of the Acacias are in bloom, the Cootamnudra Wattle (*A. Baileyana*) and the Silver Wattle of Queensland (*A. -podalyriaefolia*). It is hard to say which is the more desirable of these two excellent trees. It may be noticed that whereas the specimen of the latter species in the Kew Temperate House, wavers uncertainly between pinnate and phyllodineous foliage, all the plants seen here, once out of the juvenile stage, are constantly phyllodineous. A strikingly brilliant orange flowered creeper is certain to attract the new arrival at this season, and he may provisionally regard it as a Begonia. Later he will learn that it is the Brazilian *Pyrostegia venusta*—surely one of the most showy of all the climbing plants.

Other plants, less colourful than those first noticed, also tell the same story of a temperate climate, the palms being especially eloquent. Besides the *Washingtonia* already mentioned, large specimens of *Phoenix canariensis* will be seen, with its suckering congener, *P. reclinata*, *Cocos plumosa*, *C. Yatay*, *Chamaerops humilis* *Trachycarpus excelsa*, and an occasional Sabal and Howea. Among the Conifers which catch the eye will be the Aleppo Pine and the fastigate Italian Cypress, while if he bends to examine a lawn he will almost certainly find that it is either of the so-called Bermuda Grass (*Cynodon Dactylon*) or of Buffalo Grass (*Stenotaphrum sp.*).

The new arrival will not long be content to stay in the urban area, but looking eastward to the Darling Range, a further ten miles inland, will resolve to visit those hills as soon as possible. They are not lofty, little over 1,000 feet, but the westward facing scarp is quite steep and some of the valleys are rugged with granite outcrops. Little, if any of the vegetation remains in its primitive condition. Some areas bear only poor, scrubby growth, though in others all but the largest trees remain. At the foot of the scarp, where the soil is better, extensive vineyards have been planted, and here, as well as in some of the picturesque valleys among the hills, citrus orchards may be found very attractive where the dark green trees are hung with ripe fruits, as are the Navel Oranges at this season.

With the freshness of English woodlands still in mind, it is doubtful if the newcomer will consider the native vegetation here is very attractive, for this is an area of regular summer drought, which is reflected in the sclerophyllous character of the trees and shrubs, the foliage being commonly of greyish-green, rigid, often narrow, and pungent, and changing little with the seasons. Yet in spite of this rather austere aspect, there are individual plants of great floral beauty, and when the spring comes it is very surprising to see the wealth of bloom these hillsides can bring forth. It will require many visits, though, and much delving into the *Flora Australiensis*, before one can hope to attain even a reasonable familiarity with so many new plants, and on the first visit, even if one has done some preparatory reading, the stranger will receive few clear ideas. He will notice the abundance of the *Myrtaceae*, *Leguminosae* and *Proteaceae*, may distinguish two Eucalypts which dominate the vegetation, the Jarrah (*E. marginata*) and the Marri (*E. calophylla*), cannot miss *Acacia pulchella* which, growing to a height of some three feet, turns large areas yellow at this season, and he will be specially glad to find two very interesting yet common plants, the Black Boy (*Xanthorrhoea Preissii*), a primitive liliaceous plant resembling a *Dasylyrion* in habit, and the Cycad (*Macrozamia Fraseri*), both these having the great merit of being easily distinguishable where little else is.

Even on the coastal plain, within a few miles of Perth, is much to engage the attention, and here shorter leisure periods may profitably be spent. Many of the hill species are found here also, as well as those more strictly coastal. The first to excite admiration will almost certainly be *Banksia Menziesii*, a handsome winter flowering species attaining about 15 feet and imparting an unmistakably Australian aspect to the scenery. What a crowd of admiring visitors would gather round such a tree if it would flower like this at Kew! Associated with it and flowering at the same time are many lesser plants, among which the newcomer will notice particularly a very floriferous shrubby Hibbertia (*H. hypericoides*), a *Pimelea* with very pale yellow flowers (*Pimelea*

suaveolens), the lilac-blue *Palectasia cyanea*, a narrow-winged Acacia (*A. diptera*), besides the more abundant *A. pulchella*, several heath-like *Epacridaceae*, and the blue-flowered *Caladenia deformis*, the first to flower of a succession of terrestrial orchids.

Since the new arrival is a gardener, he is unlikely to find all the time he wants for botanising in the bush. Much of his leisure will be taken up with the determination of cultivated plants, for he will soon have found the names in use locally to be far from dependable. As this work proceeds he will become increasingly aware of the wealth of trees and shrubs which succeed locally, an abundance which would make an English cultivator of tender plants quite envious, including as it does such genera as *Acalypha*, *Rondeletia*, *Gardenia*, *Pavetta*, *Phyllanthus*, *Daedalacanthus*, *Carissa*, *Bauhinia*, *Bougainvillea*, *Mussaenda* and *Plumeria*, to name only a few at random. But along with this realisation there grows up inevitably the conviction that this wealth of plant material is seldom used to anything like the best advantage, and with a certain melancholy pride, mindful of the artistic conception and skilful planting of gardens known in the Old Country, it is realised now if never before that her's is no idle reputation abroad as a land of fine gardens and fine gardeners.

J. SOUSTER.

PETER GOOD

Among Kew Student Gardeners of this century, there must have been many who have thought with envy of the greater chances their predecessors had of being sent abroad on collecting expeditions, but it is well in these days of easy travel that the hardship and dangers of voyaging a century or more ago should not be forgotten.

The fate of Nelson, who sailed with Captain Bligh on the "Bounty" is well known. In contrast to this is the less colourful story of Peter Good, which is a reminder of the more ordinary risks of seafaring at the beginning of the last century.

I can discover little of Good's early history, which is a subject I leave to those with access to early Kew records, but he is spoken of as having been a foreman at Kew. A letter dated January 1st, 1801, from Earl Wemyss to W. T. Aiton, preserved in Bank's papers at the Mitchell Library at Sydney, shows that Good was then in charge of the gardens at Wemyss Castle, but he had been offered an appointment (not actually specified in the letter), and though satisfied with his present position, his obligation to Aiton was such that he agreed to go if so desired. As a result he sailed

in H.M.S. "Investigator," as assistant to Robert Brown, with the botanical draughtsman Ferdinand Bauer as companion, on Captain Matthew Flinders' expedition to "Terra Australis."

The "Investigator" left Spithead on July 18th, 1801, and called at Madeira, remaining for a week before departing for the Cape, which was reached on October 18th.

In Flinders' narrative, Good is seldom mentioned by name, which makes it difficult to trace his movements accurately, but there are probably very few references to "the botanists," or "the botanical gentlemen," which do not include him. At the Cape, Flinders' remarks that "as befitted the disciples of Linnaeus, 'our gentlemen' walked many miles for the purpose of botanising on Table Mountain." After minor repairs, the "Investigator" sailed on November 4th and made a good run across the Indian Ocean, Leeuwin's Land (*i.e.*, South-western Australia) being sighted on December 6th. Two days later, after dark, Flinders sailed into King George's Sound. Four weeks were spent here while the vessel was put in order for the survey which was to follow. Here the botanists collected about 500 species, and it is very probable that Good was in the party which penetrated to the salt lagoons near West Cape Howe. Leaving the Sound on January 5th, 1802, the Recherche Archipelago was visited and the botanists landed on Middle Island in that group. Nuyts' Archipelago was also visited and the coast of the mainland was followed eastwards. In February the expedition was off the coast of what is now South Australia. This was charted in detail, and two visits were made to Kangaroo Island. Entering Bass Strait, Flinders and the botanists landed on King Island on April 23rd, and the expedition then followed the continental coast to Port Jackson, which was reached on May 9th.

For some weeks the "Investigator" lay in Sydney Cove, refitting, and we read that a greenhouse which had been brought from England, in pieces, was erected on the quarter deck "for the reception of such plants as might be found by the naturalist and thought worthy of being transported to His Majesty's Botanic Garden at Kew."

Sailing again on July 22nd, Flinders continued the survey northwards and, passing safely within the Great Barrier Reef, where Captain Cook had so nearly met with disaster, reached the Torres Strait.

In his "Voyage to Terra Australis," he writes that on November 1st, "another island appeared beyond Hammond's, to the south-west, which, as it had no other name, I called 'Good's Island,' after Mr. Good, the botanical gardener."

The "botanical gentlemen" landed on this island, which must be quite small as it does not appear on any map I have yet seen, but is in the vicinity of Thursday Island.

A survey of the Gulf of Carpentaria followed, but after a few months off northern Australia, the condition of the ship made it necessary to abandon the survey and to hasten to complete the circumnavigation of the continent.

On March 31st, 1803, the ship put into Koepang Bay, Timor, and sailed southwards again on April 8th, rounding Cape Leeuwin about five weeks later, the Recherche Archipelago was again passed. The health of the company was now causing anxiety and we read of 18 men being sick with fever and dysentery. Although all possible haste was made several deaths occurred before Port Jackson was reached again on June 9th. Flinder's account from his "Voyage" says: "I left the ship at noon above Garden Island and waited on His Excellency Governor King to inform him of our arrival and concert arrangements for the reception of our sick at the Colonial Hospital." On the following day they were placed under the care of Thomas Jamieson, Esq., Principal Surgeon to the Colony, from whom they received that kind attention and care which their situation demanded, but four of them were too much exhausted to be moved and died in a few days. The first of them was Mr. Peter Good, botanical gardener, a zealous worthy man, who was regretted by all." The log of the "Investigator" mentions Good's "professional and other good qualities," and adds that his disease was dysentery.

"The Sydney Gazette" for Sunday, June 19th, 1803, which I was able to see at the Mitchell Library, gives the following account of the funeral: "On Monday last, Mr. Good, Botanist, belonging to His Majesty's Ship "Investigator," and who died the preceding day on board that ship, was brought ashore for interment. A number of Officers attended in procession to the place of burial, where, after the funeral ceremonies were performed, a party of Marines fired three volleys over the grave." Neither here nor in Flinders' account is the place of burial specified, and my own efforts to trace it proved fruitless, but Mr. H. J. Rumsey, a retired N.S.W. nurseryman, and local historian, to whom I am indebted also for extracts from the Log, informs me that the service was held in St. Phillip's (Anglican) Church, and that the interment was probably in the "Town Hall Cemetery." This no longer exists for with the growth of Sydney it was resumed for building. Good's memorial must, therefore, be in the pages of botanical history, in an obscure island which bears his name, and, most fittingly, in the Australian genus *Goodia*.

J. SOUSTER, Sydney, N.S.W.

August 11th, 1947.

“ IMPRESSIONS OF KEW ”

The name of Kew had, for many years, been closely bound up in our aspirations in the horticultural world. When after nearly seven years in the Forces, we received notice that we had been granted a year's course at Kew, under the Government's scheme for the rehabilitation of ex-servicemen, it seemed that a golden dream had come true.

We had gathered our first impressions of Kew from old Kewites, now in prominent positions, and from earlier visits to the Gardens. Closer acquaintance served to confirm our earlier impressions that Kew stands as a place apart in the horticultural world. In the huge expanse of the Gardens is represented a fair cross-section of the world's flora in a profusion that was at first overwhelming. We soon found, however, that there was on hand an authoritative staff ready to answer any queries that we cared to put forward.

We were told that we were to work with and take charge of, small sections of the large collection of plants, and that from time to time, we should move on to other sections. By this arrangement it is possible to gain a very thorough ground work in the management of a very wide range of plants, and by diligent use of one's eyes, to gain considerable knowledge outside the scope of everyday work. As well as the excellent practical experience we were also offered a very intensive course of instruction in the theoretical aspect of horticulture by some of the country's leading authorities on their own particular subjects.

The only disadvantage we find at Kew, is that the course is not long enough. An immense store of knowledge will remain untapped even at the end of 12 months of hard work and observation.

The amount of knowledge which may be gained at Kew is as much the responsibility of the student as it is of the tutor. A student must be willing to devote his whole time to his studies. If he does this, then there is no limit to what Kew can teach him; no doubt that he will leave this institution well equipped to supply whatever the world of horticulture may demand of him.

We are housed in a Y.M.C.A. Agricultural Hostel and supplied with service which can only be spoken of in the highest terms. The hostel is capacious and we enjoy the privilege of a large lounge, well supplied with comfortable chairs, writing tables, etc., which are very conducive to private study. We also enjoy the luxury of a large airy dining-room.

The hostel staff are all that could be desired—co-operative and helpful to an extreme—promoting a happy and contented atmosphere at all times. We feel that we enjoy a standard of living that can be surpassed by very few in these times of stringent rationing.

W. E. STOREY.

T. GARWOOD.

KEWITES IN QUEENSLAND

It seems fitting that some record of the lives of past Kewites in Queensland, those who lived before—some long before the advent of the Kew Guild—should be made by a Kewite now in Queensland.

Let us go back a century and a half to the life and work of that distinguished botanist and explorer, ALLAN CUNNINGHAM.

He was born at Wimbledon, near London, in 1791. The working period of his life which mostly concerns us began when he and his younger brother, RICHARD, became "assistants" to W. Aiton, who was then in charge of the Royal Gardens, Kew.

After study and experience there, Allan was recommended by Sir Joseph Banks for botanical service in Brazil. After completing his work he was sent to Australia, where he spent five years in botanical work and in exploring the country. He returned to England in 1831 to study and arrange his collections. In the course of his work in Australia he had penetrated far inland, especially in the north-west of Queensland, where climatic conditions are very trying. Low rainfall, high temperature, and hostile natives would cause anxiety.

Cunningham was ultimately offered the position of Colonial Botanist for Australia. (At that time there was no State of Queensland.) He declined the offer, but recommended his brother Richard, who accepted the post.

Richard Cunningham died in 1837. Allan then took up the position. He visited New Zealand in 1838. (A New Zealand orchid is named in his honour.)

His explorations in Southern Queensland are most noteworthy. In 1827 he set out north from Sydney and reached what is now south-west Queensland. Here he discovered the Darling Downs, a plateau of about 3,800 square miles, mostly of a very rich black soil. He was evidently so impressed with this discovery that he decided to return to Sydney to report and to seek access to this territory from Brisbane in the east. He had previously noted a gap in the range in the direction of Brisbane.

On his next journey he travelled *via* the coast to Brisbane and set out west from there towards the gap, ever since called Cunningham's Gap. Such a journey must, in those days, have been quite difficult, but his patience and perseverance must have been rewarded by seeing the magnificent vegetation on the crest of the range in the vicinity of the gap.

The palms, treeferns, giant trees, whose crowns are festooned with orchids, creepers, *Platyceriums*, etc., are still to be seen there in their virgin glory. The journey from Brisbane to

Warwick, on the Downs, must have taken Cunningham a few weeks. By the help of bitumen roads and a modern car, the writer recently did the same journey in about three hours. There is now a picnic ground at the Gap and a monument memorial of the great explorer. On the south-western railway line two stations are named respectively Allan and Cunningham. Another station named Leslie reminds us of the first fruits of Cunningham's work.

The first "squatters," Patrick and John Leslie, settled near Warwick, with their flocks and herds in 1840. A descendant, William Leslie, now lives in the ancestral home in the Scottish Highlands, but keeps in touch with Downs affairs.

One of the most prominent features of the range is the clumps of old trees of *Araucaria Cunninghamii*. The wood of this species is so much in demand, especially for building, that these old clumps are fast disappearing.

After this Darling Downs journey Cunningham returned to Sydney and died there in a cottage in the Botanic Gardens in 1839.

The country around Brisbane gradually became settled and the city grew, and the next Kewite who came was WALTER HILL, who was in charge of the Botanic Gardens from 1855 to 1880.

Many of the finest trees still alive in the gardens would have been planted by Hill. They are highly valued, especially *Poinciana regia*, for their shade and beauty. Since the Botanic Gardens were taken over by the City Council some of these old specimens are not so respected as they deserve and in recent years the present Government Botanist has had to plead for the lives of some which may have lost their beauty, but are still of much botanical interest.

Other Queensland Kewites appear in this record as but stars in a firmament where Allan Cunningham shines as a brilliant meteor, and space in the journal must be considered. Moreover, authorities for dates, etc., are not now available in some instances.

Alex. Cowan did not remain long in the Gardens. He started a nursery in a Brisbane suburb, and his nephew is now employed in the Botanic Gardens. For two years, 1881 and 1882, a local gardener named Pink, was in charge. Probably the largest variety of custard apple, a seedling from *Anona diversifolia*, was raised by him and named in his honour "Pink's Mammoth." Specimens of this fruit have weighed just under 6lbs., the fruit varies much in shape and size even on the same branch, also the leaves. The flavour of the fruit is excellent.

Next comes PHILIP McMAHON, a Kewite who was in charge of the Gardens for about 15 years. Two items are conspicuous in his term of office. Success in growing a full-sized plant of *Victoria regia* (a photograph of it was taken with the little daughter of the Governor, Lord Lamington, sitting in a chair on one of the leaves) and a great flood which swept over Brisbane

in 1898. Houses, cattle, trees, etc., were carried away in the torrent. A small gunboat was stranded in the Gardens, and a man took a contract to put the boat back into the river, but whilst he was preparing to do this a second flood came and performed the task for him.

It may be fitting to close this record with notes of the only two Kew men whom the writer has met in Queensland.

About 12 years ago while inspecting nurseries in Toowoomba, a nurseryman told me he knew a man in the city who was good on plants and he was a Kewite! The address was obtained and an early call there discovered William Mugford. He had left Kew in August, 1887, but had not done much beyond private gardening. He had risen to an important position in a large store. The nurseryman above mentioned died suddenly some few years later. Mr. Mugford, who seems to have retired, heard that the family were in straits and offered to look after the nursery for them, but he himself died suddenly in the nursery soon afterwards.

Whilst engaged amongst orchards on the Darling Downs about 15 years ago, I called at a garden of flowers and fruit trees. In course of conversation the owner declared he came from Kew, having left there in April, 1891. His name is WILLIAM DEARLING, of Sussex Farm, Oakey. He was, and I believe still is, chairman of the Oakey Co-operative and Butter Factory—a well-to-do farmer. At first he went in for private gardening, but soon realised he could do better at farming.

Since retiring from Government service the writer has been out of touch with Dearling, but a few days ago he had a letter from a nephew of Dearling, saying that he was still at Sussex Farm and “wonderfully active for a man of his age.”

WILLIAM LESLIE,
Birkdale, Queensland.

HORTICULTURE IN FILMLAND

This contribution to the Kew Guild *Journal* is in response to our Secretary's appeal for articles, and its subject is prompted by the general queries of, “But what do you do?” and “How did you find such a job?” To tell the story in its proper chronological order, I must answer the second question first.

Rehabilitation was not a word in popular use when the economic blizzard of the early thirties made it necessary for many men of my generation to re-adjust themselves and seek a new way of life. It is apt to be forgotten now that it is not only wars that can

disrupt the world, that can cause the starvation and moral destruction of peoples, and that can make foolish the egotism of men and force on them the realisation of their own insignificance. Economic wars and the maladjustment engendered by the continuance of the *laissez-faire* doctrines, which are out of date in the modern world, can be almost as destructive in themselves as well as the primary cause of wars.

To introduce this contribution with the story of my start in the film industry is to sketch very briefly the tale of my own rehabilitation. It advertises no particular virtue peculiar to myself. Chance rather than design has guided me.

As now, so in 1930, there appeared three broad roads in front of the leaving Kewite. There was the very broad avenue of Public Parks work, the rapidly widening road of the County Advisory services, and the lane, now being re-opened, to the Colonies. There were also many smaller paths along which a Kew man could venture. The almost closed path of private service, the rocky path of commerce, and the serene path of continued service to Kew, these were as evident then as now, but many smaller paths also emerged from the Kew crossroads. Some of them after a smooth beginning turned out, as they doubtless would in these days, to be blind alleys with nothing left for the traveller but to return to the crossroads and make a second choice.

My own contentment with the way I had chosen on leaving Kew is, to me, pathetically evident in my first contribution to the *Journal* in 1930. I could not then see the forces that were gathering to block my path. I had had a successful early career, with luck guiding my footsteps and my green fingers consolidating what chance had thrown in my way. Even when the United Fruit Company dispensed with my services and I had to return to England after more than four years abroad, I was not unduly concerned to find a new road. It was continued unemployment and fast-dwindling savings that gradually brought home to me the absolute necessity of re-orientation, and a new objective. First, however, I had to live, and to live, I took a succession of private posts, all unpleasant in one way or another. Then I was introduced through Kew to Sir Alexander Korda, and eventually took charge of the London Film Productions estate at Denham. The studios, now famous, were not then built, and I saw nothing in my new job to suggest the possibilities that have since developed, and for a long time I still hankered after the tropical work for which I had primarily trained myself. I did not see immediately that horticulture was needed in the film industry itself, or that I could play my part in establishing its purpose and importance. Even after the studios were built and I had been called in to help in the construction and dressing of film sets, I saw only that the industry provided an opening where I could, in planning gardens

and developing my own department, express myself without the restrictions which almost universally existed in private, public, or commercial horticulture.

I enjoyed, too, the association on terms of equality, with men of genius and near genius, with the artists and artisans, and all the vigorous life that flows and swirls through a large film studio, but without thinking that I was a pioneer in creating a possible new life for other horticulturists. To continue my earlier analogy, I should say this new life is still no safe, broad path for numerous Kew men to follow, but a narrow, steep and rather dizzy track which has no visible ending. It may later open out on to a comfortable plateau, or end in a precipice. All that can be said is that the way has been rough, but progress has been stimulating, at times even exhilarating, and that, looking back, one can recapture something of the thrills of a climb. A man should not ask for much more than that in any job.

The early large film studios were situated in urban areas and so it is understandable that practical difficulties in construction meant that scenes which in the script called for gardens or other exteriors were often played in patios, courtyards, loggias, or balconies, which could then be more simply and realistically built by existing studio labour. With the expansion of the industry, sites for new studios were found on large private estates near London, and in this way Denham, Pinewood and Shepperton had each attached to them between 50 and 200 acres of land, formerly laid out for private pleasure. At Denham, the Fishery Estate totalled 180 acres, and it was thought a good policy to attempt to preserve the amenities of the place. It was for this purpose that I was initially employed. Some few months later, when the studios were being built I was called upon to lay out the courtyard and the surrounding gardens. The success of these gardens led to the suggestion that I should undertake such garden work as was necessary for films inside the stages. To provide materials for this work, glasshouses were built and I slowly developed a staff to handle the demands from the stages. The early work consisted almost entirely in providing realistic "backings" to the windows of sets. One illustration of such a "backing" is shown. This creation of suitable "backings" sometimes they are in perspective and much more involved, still remains as the most constant of the calls for the gardeners' skill. Much more interesting, however, is the creation of complete sets, such as are shown in some of the other illustrations. Such sets now occur in most films.

These illustrations with my notes do, I hope, adequately answer part of the question, "But what do you do?" for Kewites can perhaps imagine the detailed organisation which is necessary to acquire material and build the sets in the very limited time allowed, sometimes a few hours only, with the ultimate rush and often

improvisation which becomes necessary to present flowers or plants in a state of pristine freshness the moment they are required.

The other part of the answer is easier for it bears some relation to normal horticulture. At Denham and Pinewood the maintenance of these large estates was similar in most ways to the routine work which occupies so many Head Gardeners and Superintendents throughout the country. In my present job with Metro-Goldwyn-Mayer at Boreham Wood, the possession of more than a 100 acres of arable land means the addition of agricultural work, and the initial fencing, draining, and preparation necessary for the successful and extensive cultivation of other crops, of vegetables for the canteens, of trees for the boundary screens, and of wheat where it can be fitted in.

My last thought as I finish this article is to wonder what the reaction of present and past Kewites will be to this story. I believe most will be interested, but I also hope it will be an encouragement, for those that so inclined, towards the adventurous rather than the safe, to the opening of new trails rather than to the consolidation of old.

GEORGE CATT.

B.B.C. AT KEW

Last week the B.B.C. visited Kew Gardens, and on Friday evening a description of the work done at Kew was broadcast from recordings made by members of the staff there, and by the Director, Sir Edward Salisbury, who was described by the commentator, Professor Andrade, as "a rather rare combination of scientific botanist and field botanist." Sir Edward Salisbury explained that the Royal Botanic Gardens, to give the place its proper name, has four main divisions—the herbarium, where are stored six million dried plants, the largest collection in the world; the living collection of 45,000 species (often represented by several varieties), which constitutes the gardens the public come to see; collections of fruits, seeds, timbers, etc., in the museums; and the laboratory, where the structure of plants is studied and experiments are conducted.

The Gardens, beloved by the public, are a "by-product," to quote Sir Edward Salisbury, of the scientific work which at Kew is regarded as of primary importance. For instance, many kinds of blue mould will yield penicillin that is deadly to bacteria, but only one, rather rare, kind will give penicillin that is not fatal, also, to human beings. Questions relating to fungi are among the most popular of the queries submitted to the laboratory and the mycologists, particularly from August to November, and, of

course, one does not have to stress the importance of an accurate answer being given as to their edibility. One of the most interesting experiments undertaken at Kew during the war was concerned with dandelions sent specially from Russia. In that country rubber is manufactured from this variety of dandelion, but Kew found that it would not be possible, over here, to grow a crop sufficiently large to make such manufacture a commercial proposition. Yet it is to Kew that the Far East owes its rubber trees, for the first thousand of these were sent to Ceylon from the Gardens, where they had been grown from 70,000 seeds sent there from Brazil.

During the war experiments were made with potato growing that enabled "chips" for seed purposes to be sent abroad instead of whole potatoes, thus saving shipping space and increasing home food supplies.

(Extract from the "Thames Valley Times," August 7th, 1946.)

THE SOCIETY OF JERSEY GARDENERS

Established in June, 1890, the Society of Jersey Gardeners has held a meeting on the second Wednesday of each month ever since, without a single break, even during the period of the German occupation. This in itself would be a record to be proud of, but it is even more remarkable in that at each of these meetings there is also a show of exhibits, which are staged by members for the evening only. These are no mere passing round of one or two cut blooms from hand to hand, but properly organised exhibitions of seasonal produce, which often fill a large bench, and which are judged prior to the meeting by three judges appointed the previous month.

Two special occasions in the Society's calendar are the October and November meetings when competitions are held for fruit and chrysanthemums respectively. Membership of the Society is divided into four sections: Honorary, Professional, Amateur and Juvenile. The first group pays 5s. per annum subscription and numbers 80 members; the second pays 6s. per annum and totals 110; whilst the amateurs who also pay 6s. per annum, numbers 22; and the juveniles (subscription 3s. per annum) are at present six in number. Attendance at the monthly meetings and shows, which are held at the Royal Jersey Agricultural and Horticultural Society's Board Room, St. Helier, averages between 60 and 70 members, except on special occasions, when this number is greatly exceeded. There is a paper read or a lecture given at each meeting. This is in addition to the display of exhibits. These papers and lectures cover all subjects connected with horticulture

and are frequently delivered by members and visiting experts at the invitation of the Society. An excellent rule governs these readings and lectures which limits them to half-an-hour in delivery. Succeeding speakers are restricted to five minutes each, and the speaker is allowed a final 10 minutes for reply. This is an excellent arrangement which might well be copied elsewhere, as however interesting the subject may be, too often it is made wearisome by the prolonged oratory of the lecturer.

Twice a year a form of "Brains Trust" takes the place of a reading or lecture, and members are free to discuss and answer one another's questions. This introduces a social atmosphere to the meeting which is appreciated. Fruit and Floral Committees consisting of five members each are elected annually for the purpose of controlling the shows held in their respective province. These committees also serve as arbitrators in case of a dispute between the judges.

An innovation which is perhaps unique among similar societies is that at each monthly meeting, one member is appointed to write the current series of Gardening Notes for the local newspaper, a labour of love for which in return, the journal publishes the Society's monthly reports and notices free of charge.

There is also an up-to-date and practical reference library, the best recommendation for which is the fact that there is a constant and large demand for its volumes. Since the war the Society is trying to secure new works of reference and instruction to assist those members whose knowledge of the progress of horticultural science naturally suffered as a result of the five years of mental black-out under the Germans.

The Patron of the Society is the Lieutenant-Governor of Jersey (H.E. Sir Edward Grassett, K.B.E., C.B., D.S.O., M.C.), who takes a keen and practical interest in its work. The President is Mr. D. H. Ransom. Each President holds office for two years.

During the occupation of the island by the Germans, the Society of Jersey Gardeners was one of the very few allowed to function, and it is the proud boast of its members that not only did they keep up the record of not having missed one meeting in 56 years, but even managed to continue to stage their monthly show of exhibits throughout the enemy regime. Even when gas, electricity and all forms of lighting failed, members brought in their acetylene lamps off their bicycles, and the business of the meeting proceeded according to the agenda. The maxim that you cannot keep a good gardener down was very true.

When the Germans made an order that all Englishmen were to be deported to Germany, they discovered they had made a mistake, and decided that we gardeners would be excluded from the order. We were wanted in Jersey to grow food for the civilian population, which meant so much less food for their ships to bring from France.

I was posted to the Jersey Boys' Home where there were 120 boys to feed. Under my supervision, the lads worked very hard under trying conditions. I would often harness ten or more to a small plough, which was hard work with wooden shoes on their feet, and most of them preferred to go barefooted. I would reward them with a raw swede or a stick of rhubarb, and they would just gobble it up there and then. There were a number of apple and pear trees in the gardens, and the lads would climb out from their sleeping quarters after curfew, and strip the trees of fruit, which was only half-grown. We never punished them. Those little "tummies" had to be filled at all costs!

D. H. RANSOM.

BRITAIN ERASES SCARS OF BLITZ IN RESTORATION OF KEW GARDENS

By T. H. EVERETT

After an absence of more than eight years, I visited the Royal Botanic Gardens at Kew, to write for American readers an account of the changes wrought there by six years of war. It was with no small degree of apprehension that I made my way from London to suburban Kew. As the electric train speeded me to my destination I saw much visible evidence of the destruction caused by bombs, incendiaries, doodle-bugs, rockets and other tools of modern warfare.

The quarter-mile walk from Kew Gardens Station to the Victoria Gate entrance revealed ominous gaps in the rows of neat dwellings and small shops that 20 years ago I knew so well. The bricks and rubble had been cleared from these blitzed places, and in many cases tidy vegetable patches flourished in the garden areas of houses that no longer existed—vegetable patches which even in December provided cabbages, Brussels sprouts, beets and lettuces for the tables of the gardeners—welcome additions indeed to the present meagre English fare.

My heart sank as I thought of the gardens with their great ranges of greenhouses, laboratories, herbaria, libraries, and other offices of horticultural and botanical importance, all exposed to this destruction—my heart sank, but as I mused Victoria Gate loomed before me, I paid my penny entrance fee and entered the Kew, where two decades ago I was a student. The same Kew—precisely the same Kew—war has not changed Kew Gardens—that is the report I have to bring to interested Americans.

W. M. Campbell, the curator, and his five assistants, greeted me as matter-of-factly as if I had been away for but a long weekend. We talked of plants and of personalities in the gardening

world. Quietly they told of 30 high explosive bombs and of thousands of incendiaries that had fallen within the Gardens' 260 acres; they spoke of the destruction of glass in the greenhouses, and of the improvisations they had adopted to protect their plants; they told of the admirable work performed by women gardeners during the war years; and of the advanced course in horticulture that is now being offered to a selected group of ex-service men.

With assistant curators, C. P. Raffill and Lewis Stenning, I toured the greenhouses. Everywhere the plants were in splendid condition. Never do I remember seeing the tropical ferneries so green and flourishing. The mighty palm house (designed by Decimus Burton, and completed in 1848) was filled with rare exotics, and its warm moist climate provided welcome relief from the chill outdoors of England's December. Thousands of orchids, hundreds in bloom, filled the greenhouses allotted to this aristocratic clan. Nearby dozens of the heat-loving Asiatic pitcher plants (*Nepenthes*) flourished with an abandon surely rare in temperate climes. In sharp contrast was the cold air of the greenhouse devoted to American pitcher plants (*Sarracenias*), and here Mr. Stenning called attention to Kew's desire to acquire certain additional species to complete the collection.

The succulent house still shelters a vast collection of cacti and other desert plants, and the famous Mojave Desert scene (presented to Kew by the American, Mrs. A. Sherman Hoyt in 1929, and displayed in a special greenhouse) appeared as perfect as the day it was first installed. The Begonia house was gay with bloom—a new hybrid named *Richmondensis*, bearing a profusion of large pink flowers, particularly attracted my attention. Number Four, the conservatory house, was as colourful as ever with Poinsettias, Begonias, Lantanas, Abutilons, and a hundred other kinds of flowering plants vying for public attention.

The greenhouse most seriously damaged during the war was the Temperate House, a structure 628 feet long, 140 feet wide, and 70 feet high; vast quantities of glass were blown out, but the framework was not seriously harmed, and it is difficult for the visitor to see evidence of damage now. Inside, Australian, New Zealand, Chilean and other warm-temperate region plants are thriving as of old—the huge pink fragrant trusses of the rare *Luculia* provided an outstanding exhibit.

December is not, of course, the best season to inspect outdoor gardens, but certainly the general landscape effect of the pleasure grounds and arboretum at Kew remains unchanged. I was told that some big trees had been lost in the bombing, but their loss was not noticeable. The lawns were green as ever, broken in places by neat flower beds in which Wallflowers, Forget-me-nots, Arabis and Pansies were bearing a few premature blooms.

A war innovation was the "Demonstration Allotment" (Victory Garden) on the spacious lawn in front of Kew Palace. Here were orderly rows of leeks, lettuce, cabbages, Brussels sprouts, dwarf and bush fruits, and even peas, with the vacant areas between neatly spaded over.

As I walked slowly toward the main gate I noticed trees labelled, "Bitternut—*Carya cordiformis*—N. America," "Rum-Cherry—*Prunus serotina*—N. America," and I saw also a fine specimen of the American *Magnolia grandiflora* trained against the wall of a museum building—my thoughts turned to home and to our own New York Botanical Gardens, whose establishment was inspired by a lady's visit to Kew more than 50 years ago.

I made my exit through the main gate, observed the allotments occupying Kew Green, where formerly white-flannelled cricketers played their lazy game, and saw more evidence of bomb damage on near-by buildings. Surely Kew lives up to its motto, "Floreat Kew."

HISTORY OF THE BOTANIC GARDENS, PENANG

It is interesting to trace the history of the Botanic Gardens in the East, and to do this one must go back to the days when the Portuguese conceived the idea of breaking the Venetian monopoly of the spice trade. At a later date the Dutch followed with a view to superseding the Portuguese, and finally, the Honourable East India Company was formed by certain London merchants.

About this time the West Indies Government established a botanic garden at St. Vincent, which gave the cue to the East India Company to do likewise in India, while the Dutch started one near Colombo, the idea in each case being to establish spice-yielding plants likely to prove of commercial value. In 1817 a wave of scientific enthusiasm resulted in the formation of botanic gardens on a somewhat elaborate scale in Java and Ceylon. Until the end of the 19th century botanic gardens such as those of Calcutta, Buitenzorg, Peradeniya and Singapore were engaged in most important investigational work. The introduction and trial of new crops with the object of broadening the agricultural industries of countries has occupied a major part of the time and work of botanic gardens. This work, aided by the Royal Botanic Gardens, Kew, resulted in many industries, such as, for example, tea in Ceylon, and rubber in Malaya, being formed long before the inadequate funds of private individuals would have allowed. Quite naturally the latter preferred to embark on an industry which had already passed the experimental stage, and one which showed a reasonable opportunity of success.

There has been a great deal of misunderstanding as to the objects and organisation of botanic gardens abroad, and many people appear unable to distinguish between the latter and public parks. To remove the confusion a short explanation may be appreciated. For many years, until comparatively recent date, the trial of new crops, distribution and breeding of new races of plants, etc., were almost exclusively the work of botanic gardens and experimental stations. In many cases they form the nucleus of the present departments of agriculture, which have a much larger scope inasmuch as instead of growing small plots, large acreages may be put down under a single crop. Moreover, the more comprehensive staff of scientific officers enables a department of agriculture to complete its scientific experiments, including the manufacture and analyses of the product.

The botanic garden of to-day is engaged principally in engaging and investigating the wild plants from surrounding countries, introducing, indexing and generally providing useful information, maintaining collections not only of the native plants, but of all plants which might be expected to grow when introduced.

Space does not permit of more than one or two plants of each kind being cultivated in botanic gardens; these serve both for the propagation of planting material and for purposes of study. The botanic garden in the tropics is usually the centre of horticulture, forming a place of resort, training gardeners, supplying planting material, and giving advice and assistance in horticultural matters. In such gardens, however, floral displays, beds and borders of flowering and foliage plants are maintained, but first and foremost the aim is to further botanical ends.

The Botanic Gardens Department, Penang, has had a somewhat chequered although interesting existence since it was established in 1884. In its early days it functioned as part of the then Gardens and Forests Department, Straits Settlements, and was engaged chiefly in the cultivation of essential commercial plants, inspection of crops and advising the planting community generally. The botanical and horticultural side was developed by the first Superintendent, Mr. Charles Curtis, who, when the Agricultural and Forests Department respectively took over all work connected with economic crops and that of supervising forest work, made itself responsible for the layout of the Botanic Garden. Mr. Curtis continued his work from 1884 until he retired on account of ill-health in 1903. Many plants have been named in compliment to him, and these include such plants as *Paphiopedilum Curtisii*, species of *Nepenthes*, *Medinella*, *Pentas* and others, and most are planted in the gardens to which he contributed so much. It is on record that no less than 11,500 trees were supplied from the nursery for roadside and other tree planting in 1885, a great tribute indeed to Mr. Curtis' energy and skill.

In 1903 an old Kewite, Mr. W. Fox, succeeded Mr. Curtis and remained in charge of the gardens until 1910, when Mr. R. Derry, also of Kew, was assistant to Mr. Fox and took charge of the gardens during the absence on leave of the Curator. Both continued the good work set by their predecessor, and in addition they continued to visit coconut and other estates to give planters advice.

The year 1910 was a critical time for these gardens; they were handed over to the municipality for the purpose of constructing a large reservoir. This would have necessitated damming the stream in the valley and thereby much of the attractive scenery would have been destroyed. Luckily the plan was abandoned before the gardens suffered much harm and they were handed back to the Government in 1912.

From 1910 until 1921, however, there was no European officer in charge of the Botanic Gardens and they deteriorated rapidly; much of the valuable work carried out by Messrs. Charles Curtis, William Fox and R. Derry was wasted. During the period the Herbarium collection was increased and more time was devoted to horticultural and botanical work, though the former agri-forestry work of the department was allowed to lapse.

In 1921 Mr. F. Flippance was appointed Assistant Curator, Penang Gardens, which was a part of the Straits Settlements Gardens Department. As the first Assistant Curator for 11 years, Mr. Flippance was faced with a formidable task, but in addition to relaying out the paths, drives and gardens generally, he was frequently called upon to give advice on roadside tree and other planting work in the municipal area.

At this time the work of the department began to extend, ornamental planting of gardens throughout Georgetown, the Governor's ground, as well as the gardens at 2,500 feet on Penang Hill, were developed. An area of land adjacent to the entrance to the gardens was leased from the municipal commissioners and laid out as a nursery. In 1936 a portion of this area was levelled and a fine formal garden was constructed. Two large water lily pools and fountains were attractive features of the garden, in addition to the conservatory at the end of the vista, and the ornamental stone pillars that support a long pergola upon which climbing plants grow and provide a pleasant retreat for visitors.

In 1925, Mr. R. E. Holtum succeeded Mr. I. H. Burkill as Director of Gardens, Straits Settlements, and Mr. Flippance remained in charge as Assistant Curator, Penang, until 1937, when he was appointed Superintendent of the Gardens and Forestry Department Hong Kong.

Mr. M. R. Henderson, Curator of the Herbarium, Singapore, was in charge at Penang for a short time, as was also Mr. J. W. Ewart, while Mr. J. C. Nauen assumed charge as Assistant

Curator in 1939 and remained until he joined the Forces. He was taken prisoner and unfortunately did not survive the hardships of being a prisoner-of-war during the Japanese occupation of Malaya.

Upon re-occupation by the British in September, 1945, it was found that several of the Asiatic staff had been working in the gardens throughout the Japanese occupation. Lack of funds and proper direction, together with war debris, had resulted in the gardens getting into a very bad state. Excavations for both storage and shelter, and a large munition works for assembling torpedo bombs were afforded excellent concealment from aerial attack, and much of the heavier war material left behind by the Japanese has not, up to the time of writing, been removed.

Unfortunately some months elapsed before efforts were directed to the rehabilitation work, and as this was further hampered by the continual changes in the supervisory staff, it was not possible to carry out the re-establishment as quickly as it might otherwise have been done. In a period of ten months no less than seven European officers were in charge, and it was not until July, 1946, that a decision was made to divorce Penang Botanic Gardens from its parent establishment in Singapore.

On this separation taking place Mr. F. S. Banfield assumed control of the Penang Department which, in addition to the Botanic Gardens, also included a Hill Station Grounds at 2,500 feet, residency and other Government gardens. In addition to the above duties Mr. Banfield acts as Adviser to the Public Gardens in Kuala Lumpur, and to the Municipality, Penang. The first task undertaken was the identification and classification of plants, as during the occupation, owing to neglect, many plants had been lost.

Since July, 1946, a thorough survey of the Gardens has been taken, collections have been re-grouped, and a general reorganisation has taken place. The nurseries have been reconstructed and many alterations have been made, including the replanning of a formal garden. In the nursery the opportunity is taken of growing specimen trees and shrubs which may be used to beautify private gardens, as well as for roadside and park planting.

The Royal Palm Avenue was established from trees grown in the Public Gardens, Kuala Lumpur, and in Peel Avenue these Royal Palms are classic in their simplicity. Whether viewed under the midday sun, or under a cloudy sky, in full moonlight, or in torrential rain, their graceful stems detach themselves from their surroundings and appear as so many slender columns each surmounted by feathery scrolls. This avenue is approximately 1,600 yards in length and was planted in 1936. Its dimensions and proportions are almost perfect, yet for such uniformity of growth to be maintained for so long, is most unusual with this palm.

The Municipal Commissioners frequently seek the advice of the Department which, throughout the years of their existence, has contributed no small part to the success of establishing and maintaining the roadside trees of Penang, which are undoubtedly without equal anywhere in Malaya. The remarkable avenues of Angsana trees (*Pterocarpus indica*) are particularly fine. The lovely golden yellow flowers are borne in masses on trees nearly 100 feet high and later they spread a carpet of gold on the roads beneath. They bloom at intervals over a period of four or five months and are indeed a spectacle not easily forgotten.

One important function of the Botanic Gardens is the exchange of plant material with other countries. Lectures and demonstrations to parties of students and others are given, whilst the senior staff teach and examine classes of schoolchildren in nature study, forestry, botany and horticulture.

The Botanic Gardens are situated about five miles from the town of Georgetown, and are completely surrounded by evergreen jungle-clad hills of 1,200 feet. They are regarded as one of Penang's chief assets in that not only do they provide an open space, but they also provide an unfailing source of interest to jaded ocean travellers.

The actual site of the Botanic Gardens is a valley divided by a stream into two sections. On either side of this stream are a series of close-mown undulating lawns on which are tastefully arranged beds of flowers and other plants. Nearby is a bandstand where the Municipal Band plays twice a week, when the colour of the flowers in the gardens is added to by the bright dresses of a cosmopolitan crowd of visitors.

Several hundred feet above the gardens is a waterfall that may be viewed from several places in the gardens and from which the latter receive their name. The offices are unobtrusively situated a few hundred yards from the entrance, on the jungle edge, and within the office there is comprehensive library and Herbarium.

Throughout the Gardens are situated ten well designed plant houses in which excellent collections of plants are maintained. Unfortunately a great deal of repair work is necessary before the houses can be put into full use.

Another most charming part of the Gardens is the Lily Pond, which lies about 100 yards from the motor road, and is approached by a shady path and surrounded by large tree ferns and a variety of tropical trees and creepers. Another delightful corner of the Gardens is the Fern Rockery, which was constructed around the stream which is fed by the waterfall.

Other excellent features in the grounds are the Sun Rockery, which covers about an acre of land, and also the Formal Garden, which is most popular with the residential population. The two

chief borders are each about 100 yards long and contain a wealth of flowering plants, so selected as to ensure that throughout the whole year the borders remain colourful. The successional displays of annuals in the beds are rather reminiscent of the gardens of the West, and Europeans find the closely clipped hedges, lily and other ornamental pools and closely mown lawns, much to their liking.

GERMAN OCCUPATION OF THE ISLAND OF JERSEY

Quite a lot has been written about the German occupation years, and most of you who have read about it will agree that most of it dealt only with the black side; sad and sorry affairs, sufferings, hunger, and much worse.

Most people know that these happenings always occur in occupied countries, and those of us who decided to remain in Jersey rather than evacuate, had a very good idea that life was not going to be too easy, we knew that food, fuel and clothing, would be very scarce.

I am going to write in diary form as much as I can of the bright side of the occupation, and perhaps after reading it, you will agree that we, in occupied Jersey, fared very much better than other occupied countries.

JULY 1ST, 1940.

Early this morning, German planes flew very low over the Island, dropped messages to the authorities, calling upon the Island to surrender. The messages were signed by the Commander of the German Air Force in Normandy. White flags had to be flown as a sign of surrender. A German airman arrived at the airport having seen the signs of surrender, later German troops and officials arrived, and the German occupation of Jersey had commenced. One of the first orders given by the Commandant was this: Assemblies in Churches and Chapels for the purpose of Divine Worship are permitted, prayers for the British Royal Family and for the welfare of the British Empire may be said. Church bells may ring ten minutes before services. This order remained unaltered throughout the occupation. Cinemas and concerts are permitted. Prices must not be increased or decreased. Any shopkeeper offending against this order will have his shop closed. Removal of ban on listening to English broadcasts. Letters may now be posted to Guernsey.

Two meatless days are ordered—no meat to be cooked or eaten on Thursdays and Fridays. This order, like many others, was

observed for a time, and then gradually forgotten by those who could afford to forget! Rabbit-keeping is now an Island-wide proposition.

Horse-drawn buses commence a Sunday service, there being no motor buses on that day. Road signs in German make their appearance in various parts of St. Helier, especially those directing to the "Rathays" (*i.e.*, Town Hall), which soon became known as the "rat-house."

Germans play Jersey XI. at football. What a licking we gave them! Germans cancel football matches arranged with them. A German officer, after witnessing a game of cricket at the playing fields, decided to teach his men the rudiments of this essentially English game. He accordingly proceeded to a sports dealer in the town and purchased bats, stumps and balls, etc. Next day the dealer was surprised to see the officer return, bringing with him the cricket ball, saying, "Can I have a soft ball, my men find this one too hard!"

Channel Islands delegation leaves for France to purchase essential commodities. These men were brave. They took a big risk crossing the sea, with the British Navy and R.A.F. likely to show up at any moment. A few days later a consignment of seeds, etc., arrives from France for local farmers. There is hope of meat from France. Jersey Chess Club decides to carry on. Fishing now permitted up to a distance of three miles from shore. Food supplies arrive from France. Communal meals for children commence at the Chelsea Hotel and other centres throughout the Island, reaching the figure of some 3,000 daily. Green Room Club put on a show at the Playhouse. The Jersey Electricity Company commences to make salt. Fruit and vegetables are plentiful. Much cider is being made and consumed. Many people are making hay-boxes for cooking.

The occupation has reached its third month, which does not seem to synchronise with the Germans' assertion on arrival that the war would be all over in three weeks.

Some soldiers even thought they were in the Isle of Wight and it was only a matter of purchasing a train ticket for London.

At this time we used to watch large numbers of German planes leaving, flying over or in the vicinity of the Island, *en route* for England and the "Battle of Britain." It was always a pleasure to count many less on the return journey. We used to listen for the figures of planes brought down by the R.A.F.

Large queues form to obtain ration cards for textiles—the ration cards were much easier to obtain than the goods they were intended to purchase.

Italians who wish to return to Italy were invited to apply at the Commandant's office—there was no rush.

Germans give notice that wreaths may be placed on the Cenotaph and soldiers graves on Armistice Day, November 11th. Local Traffic Control men are ordered to salute all German officers properly, as at times the salute is anything but polite. It is learned that the confiscation of wireless sets might be put into effect. Colonel Schumacher has intervened and appealed to the German authorities in Paris on Jersey's behalf. Colonel Schumacher is German Field Commandant of Jersey. Later we are warned that retention of wireless sets is dependant on good behaviour.

CHRISTMAS DAY, 1940.

In spite of all our fears, with a bit of saving, scheming or wangling, the provision of festive cheers was nothing short of wonderful. For some time there had been a lot of secret pig-killing, which meant that pork found its way to consumers. If the Germans had seen the tables laden with good things still produced after six months of occupation, many new orders would have been issued.

BOXING DAY.

Dances are held at the Pavilion and the Plaza, German troops attending in large numbers. At the last moment the curfew is extended until midnight. Visit of Hans Freidrich Blunck, one of the best known German poets.

During the month several treats have been given to children, including visits to cinemas. Quantities of oranges and nuts have reached the Island from France, and certain goods held back have been released. Christmas trees were cut from the grounds of the estate where I was employed as Head Gardener. The trees were given to children's parties. I had 3,000 in plantation. The Germans came along and ordered 500 for the troops. They paid for them, so no harm was done, because the trees needed thinning out, and I knew that had I refused, they would just help themselves and mess up the plantation. I caught a glimpse at one or two of their camps and saw that they had fixed a tree at the foot of their beds. The trees were decorated with cotton-wool and silver paper, and I saw the soldiers give little bags of sweets to our local kiddies. Those Germans were certainly homesick.

On New Year's Eve local people held parties at home, the curfew being extended to 3 a.m. New Year's Eve dances held at Pavilion and Plaza.

At the end of six months of occupation we find ourselves in much better circumstances than we dared hope for at the beginning. The Germans seem to be out to make a good impression, and there is no doubt that they respect the local population.

JANUARY, 1941. NEW YEAR'S DAY.

Germans entertain a 100 children at the Continental Hotel. Permission given for ex-Servicemen's clubs to reopen. Play presented at the Opera House by the Green Room Club. Practically the whole of the German Air Force leaves the Island. Some of the men say they are going to Africa, but none of them seem very happy about leaving Jersey. Germans give band performance in the Parade and also at the Forum. Twenty-five horses arrive from France for the Civil Department of Transport. Cinemagoers now notified that comedians or heroes may be applauded.

Allotments scheme started at "Les Silleries," my place of employment, just over a 100 seven perch plots under my supervision. The holders worked hard, and round about harvest time the Germans decided to take over the house on the estate. They also erected army huts in the gardens, and let loose their horses in the rose garden. Five hundred H.T.'s went west first day. The allotments were not a great success. Crops were stolen after curfew, but quite a few holders stuck it out to the end.

Soup is to be made three times a week and distributed from centres and sold at a 1d. per bottle. A few bananas and oranges arrive, and kiddies were delighted to see the appearance of ice-cream carts.

The inhabitants are warned about interfering with military signposts, some of which have been found turned round the wrong way.

The Germans have been here 12 months and we are all very thankful that we have been allowed to retain our wireless sets. Most people have gone thin—some almost unrecognisable—and everyone has had wind pains which we named "Jersey rattles," caused by eating lots of swedes. In spite of all this, the local School of Physical Culture gave a display in the Howard Davis Park. Blackberry leaves and Lime tree blossoms used as a substitute for tea. Germans show the film "Victory in the West," with English captions. The Germans open a cabaret at the Plaza named "Bel Ami." This consists of Continental artists, and champagne is served galore at ten marks per pottle (21s. 8d.). The cabaret was for the troops, but was eventually opened to the public.

First charcoal bus running a service. Candles are fetching more than 1s. a piece. Carbide for cycle lamps arrive from France. I made good use of my carbide lamp in the home.

The German troops would help themselves to carrots, turnips and any kind of vegetable growing in the fields. One morning a group of them were seen helping themselves by a friend of the

grower. The friend 'phoned the grower telling him there was a lot of "Green Fly" in his field. As soon as the grower turned up, the troops bolted. German soldiers kept clear of trouble because when reported to the Commandant, they were sent to the Russian front. That is one of the reasons why they steered clear of trouble, but they were able to take what they wanted after curfew. "Green Fly" was the name we gave the Germans because of their green uniform. The end of the year found us quite cheerful and quietly optimistic for the next twelve months.

JANUARY, 1942.

Big military parade through the town, and afterwards an Air Force band plays in the Royal Square. Air Force orchestra gives symphony concert at the Forum. Issue of coffee substitute and 1 lb. of oranges to children. Substitutes for tea and coffee are now being largely used, carrot tea being popular, with beetroot tea coming next, and parsnips for coffee, but I liked sugar beet tea best. We washed the root, shredded it and roasted it in the oven until brown and crisp, placed a couple of spoonsful in the teapot and poured boiling water in as you would real tea. It was quite good. In fact, I know of several people who are still making sugar beet tea daily.

The Germans have forbidden the publication of the local rainfall figures as they might be useful to the "enemy." The markets are full of Easter flowers, of which the Germans buy large quantities. It was not because there was not much else to buy, but because they were really very fond of flowers, but if a garden full of flowers was in the way for a camp site, it was uprooted.

It is freely stated by the troops that they anticipate invasion by the British or Americans, and it is evident that they have got the jitters very badly. What a difference from July, 1940, when Germany was going to complete the invasion of England within three weeks.

What we have dreaded for a long time has come to pass. All wireless sets belonging to the civilian population are to be handed in and retained in custody by the Feldkommandantur. The German authorities tried hard to have this order rescinded, but it was no use. The order was "decreed by a higher command," one of the supposed reasons for the order is that the German troops are learning too much about the real condition of things. The Germans issue a notice to the effect that the confiscation of wireless sets is not to be regarded as a punishment, but as a measure taken by the High Command for military reasons. It was very hard luck for all of us, but most of us knew it would happen. I have an idea the British Command would do just the same for military reasons. But as you have heard, all the sets were not taken in. Many people were determined to take the risk of keeping one. I know of five who were caught and sent to concentration camps and died, but there were very many who

served sentences in Jersey. My friend bricked his in the chimney stack of his house, with the connections well hidden. He was never caught. A typewritten pamphlet is being circulated headed Bulletin No. 1 of the British Patriots, urging the population not to give up their wireless sets.

The Germans invite the public to a variety concert at the Forum; invitation is one thing, acceptance another. The public was well catered for by the Green Room Club, and several other clubs, etc. Theatrical talent was tapped, and some really good shows were put on.

The Germans bring over from France a full-size steam railway engine. With all solemnity, the Germans officially opened the new railway. A special platform was erected, and speeches were made by various German officials, the Military Commandant blowing a whistle for the train to start. A band enlivened the proceedings, and afterwards the officials adjourned to the Pomme d'or Hotel for a special commemorative dinner. And to think that Jersey scrapped the trains years ago because they were out of date! The children are continually putting stones on the line and the train sometimes jumps the line. Most of the children have never seen a train before.

SEPTEMBER 15TH, 1942.

The population had their second big shock to-day, and this was even worse than the confiscation of wireless sets. By order of High Command the following British subjects will be evacuated and transferred to Germany:—

All those men not born in the Channel Islands, and from 16 to 70 years of age who belong to the English people together with their families.

The Bailiff (Sir Alexander Coutanche), who was President of the Superior Council of the States of Jersey during the German occupation, made vigorous protests, but it was no use. He was told it was a direct order from Hitler and had to be carried out. The Germans were not at all happy in carrying out their instructions. They appeared to be very shamefaced and did not look anything like as cheerful as the people being deported.

I was packed up ready with my wife and two boys, when we heard there would be exemptions in cases of persons employed by the essential services, etc. I happened to be one of those, but there was no definite statement as regards the length of these exemptions, but it so happened that we never went.

The deportees themselves were very brave. They sang and joked on the way to the quay.

Those who had kept their wireless sets heard Big Ben strike at midnight and everybody is glad that 1942 has gone and that we are on the eve of another year of hopes.

JANUARY 1ST, 1943.

Our hopes are bright. Many parties and dances are held, and the Green Room Club presents a pantomime at the Opera House. The Lending Department of the Public Library sets up a new record with 657 issues in one day. The pantomime has had a good run, and the last performance was attended by the German Commandant and several high officers. After three years of occupation, the troops seem to be very unhappy, and almost without exception they declare the sooner the war is over the better, irrespective of who shall win. Numbers of them anxiously await news of families in parts of Germany which are constantly bombed, and it is difficult to find a "red-hot" Nazi these days.

The Gestapo is on the trail of persons suspected of having wireless sets, but they cannot find them all, and the news spreads as soon as it is broadcast.

Tea is the commodity fetching the highest price at present on the black market, £12 a pound; butter 25s. per pound; and pork 15s. per pound.

Green Room Club presents Shakespeare's "Merchant of Venice," at the Opera House. The actor who took the part of Shylock was informed by the Germans that his interpretation of the part was not sufficiently repellent.

A young lady who was alleged to have thrown horse manure at a column of troops and who was sentenced to three months imprisonment, appealed against the sentence, with the result that she had it doubled.

CHRISTMAS DAY, 1943.

Foodstuffs are very scarce and black market prices so high that only those with large incomes could cope with them. Pork is going at £1 1s. 4d. per pound (10 marks). There has been a lot of brandy about, the doctors having been generous in prescribing it for their patients so as to prevent the Germans seizing any stocks.

NEW YEAR'S DAY, 1944.

Everyone quite cheerful and optimistic. A football match at St. Ouens against St. Clements (a distance of about eight miles) was attended by over 200 of the parish, who were conveyed there in seven motor lorries using stolen German petrol. A well-known resident has been sentenced to three months imprisonment for being in possession of German brandy—the sentence to be served when the Germans have won the war. The following is a sample of German orders the population is supposed to digest:—

As from now on "Fieldkommandantur 515" is to be replaced by "Platzkommandantur." Cases before Courts martial are to be tried by the "Festungskommandant," and the notice is signed by the Platzkommandant.

JUNE 6TH, 1944.

Invasion. From the early hours we guessed something unusual was happening, owing to the large number of planes passing over. Red Cross flags placed near all hospitals, and soldiers wearing Red Cross armlets and equipped with steel helmets and rifles. Underground hospitals are fully equipped for use.

Proclamation to the Population of the Island of Jersey.

Germany's enemy is attacking French soil. I expect the population of Jersey to keep it's head, to remain calm and to refrain from any acts of sabotage and from hostile acts against the German Forces, even should the fighting spread to Jersey. At the first signs of unrest or trouble I will close the streets and secure hostages. Attack against the German Forces will be punishable by death.

Der Kommandant der Festung Jersey.

Planes, planes and planes all day and night passing over. The noise of battle is growing louder as the Allies come across the Cherbourg peninsula, gunfire being continuous. Sounds of gunfire closer as the Allies reach Borneville and Cartenet, which are only about 15 miles away. With the invasion now in full swing, we feel confident that our release will not be long delayed. The Germans appear to have relaxed a little, an uncertain attitude prevails among them, while numbers declare they will surrender if the British or Americans arrive. Quite as many are ready to obey orders and fight to the last man, but all are agreed that they cannot win the war. Quite a number of youths escaped in boats and canoes to the French coast. Some were unlucky enough to fail in the attempt. Some lost their lives by being fired on by the Germans; others were drowned. The few that got away took a big chance with mines off the French coast. Those lads certainly had pluck.

Black market foodstuffs after 4½ years of occupation: Butter, £4 5s. 6d. per pound; sugar, £1 1s. 4d. per pound; beef, 17s. 1d. per pound; pork, £1 1s. 4d. per pound; tea, £20 per pound; wheat, £8 per cwt.; potato flour, 6s. 4d. per pound; and so on. It was absolutely out of my reach, but we had our substitutes. Tea—parsnips, sugar beet grated and roasted in oven. Coffee, ditto. Currants—sugar beet cut small and half roasted, or dried elderberries. Tyres for cycles—rubber garden hose or rope. Flour—potato flour. Salt—sea water. Tobacco—cherry leaves, chestnut leaves, rose petals, Butterburr, coltsfoot, clover.

I tried all these tobacco substitutes. The rose petals made me very giddy. I tried all the others, but could not get on with it, so I grew my own real tobacco, picked the leaves green, dried them and hung until brown. Our local tobacco factory cut and treated the leaves. I managed to smoke about 12 lb. a year. It was very strong but good in the pipe.

It was about the middle of December, 1944, when we heard that a Red Cross ship was on its way to the Channel Islands from Lisbon. That was indeed grand news. All of us were showing signs of wear. We wanted food. We hoped the ship would arrive in time for Christmas, but this was not so. She arrived a few days later, December 30th. The ship was the International Red Cross ship "Vega." She had aboard 500 tons of flour, medical supplies, and one Red Cross parcel for every person once a month. Those parcels were the best thing that ever happened. We had our parcels from now on, and they saved us.

Well, the story is nearly over. Our next big day was Liberation Day. Everybody went mad with joy, and now Jersey has got back rapidly to the atmosphere of former days, and the passing of time will erase the memory of those trials as a very bad dream.

Before ending this story, I must give special thanks to one man, our Bailiff—Sir Alexander Coutanche. He protested strongly to every German order. Many is the time he won the day. He took many grave risks for our sakes. For instance, crossing over to Guernsey in a German E boat to consult and appeal to the Commandant *re* food, etc., a very dangerous trip, but, he was a man!

D. H. RANSOM,
 "Glen Rose," Samares, Jersey, C.I.

AN APPRECIATION RE THE LATE MR. T. W. BRISCOE

After reading Mr. Lavender's obituary notes on Mr. T. W. Briscoe, late of Tutshill, Chepstow, I would like to accord my appreciation of the deceased as a good gardener and a friend, personally.

I have known him for many years as a valued contributor to the pages of "Amateur Gardening," and also as the author of several gardening books, notably "Orchids for Amateurs," and "The Amateur's Greenhouse," both of which have been before the public for a long term of years.

As a cultivator, he once gave me a little surprise. Some seeds of *Antigonon leptopus* came into my possession and these I forwarded to him as possibly something of a novelty, but, in acknowledging, he implied he was familiar with the subject when in India, and had also grown it.

This reminds me, that in the first world war he was drafted to India, where he travelled extensively. For three months he was at Darjeeling, which he said he found delightful. From there he visited a tea plantation, and had a fortnight at Manipur where Cinchona was grown and quinine produced. He also went on a plant collecting tour in Sikkim and Nepal with an Indian nurseryman—B. Ghose, of Darjeeling. He visited the habitat of *Primula Winteri* which, he said, at that time was causing speculation and interest in the home country. He records that he looked up Kewites when in India, and as some had influence with the Military Authorities, he was given special permission to make visits which otherwise would not have been available. He found India very agreeable and would have been very content to remain, but was transferred to France in 1918.

Mr. Briscoe was well known in gardening circles, and also much esteemed in the neighbourhood of Chepstow, assisting allotment and gardening societies, and was booked as judge for proposed 1946 shows. He had been a parish councillor, and was on the District Council.

Mr. Briscoe lost his aged employer only nine months prior to his own passing, and they lie side by side in the churchyard of Tidenham, Chepstow.

HENRY A. SMITH.

In Memoriam

HENRY JACKSON MOORE

PEACE GARDEN BRAIN CHILD OF HORTICULTURE

Henry Jackson Moore, C.M.H., A.H.R.S., aged 67, of 29, Montgomery Road, Islington, Toronto, originator of the idea of the International Peace Garden, established as a boundary between Canada and the U.S.A. as a symbol of goodwill, died suddenly on Saturday, September 21st, 1946, at Kingston, where he was stricken with a heart attack while on a business trip.

Educated in England, Mr. Moore was a graduate of Kew Gardens, Surrey. He came to Cornell University in 1907 as an instructor in horticulture and, two years later, was appointed horticulturist at Victoria Park, Niagara Falls, where he remained for ten years. He was also associated for some years with the Ontario Horticultural Society as lecturer, and with the Provincial Government Highway Department, retiring from his position as chairman, a year ago, because of ill-health.

The I.P.G. was sponsored in 1929 by the American Gardeners' Association in the cause of international goodwill. Dedicated in June, 1932, the formal area of the Peace Garden comprised about 900 acres, equally distributed between the international boundary lines of North Dakota and Manitoba.

In 1936 Mr. Moore was awarded the Associateship of Honour by the Royal Horticultural Society for distinguished service in horticulture. This is one of the highest honours the Society can bestow on any person outside England, and Mr. Moore was the first Canadian to have this honour conferred. He was also awarded the Canadian Medal of Honour.

In 1936 Mr. Moore delivered a lecture before the Royal Horticultural Society on the subject of Canadian gardens.

He was a resident of Islington, Toronto, for 25 years, and a member of the United Church.

Surviving are his widow, the former Gertrude Mary Barlow (daughter of Mrs. A. M. Weir), and a son, H. J. Moore.

“Toronto Globe and Mail,” September 22nd, 1946.

CAPTAIN HUGH A. PETTIGREW

It was with deep regret that the friends of Captain H. A. Pettigrew heard of his tragic death in France on the 25th January, 1947, as a result of a road accident.

Hugh Allan Pettigrew was born at Ayr on the 24th January, 1871. From 1887 until 1891 he worked for the Marquis of Bute in the Cardiff Castle grounds under his father, Mr. Andrew Pettigrew, who was then Head Gardener. He entered Kew in 1891 and remained for the usual period of two years as a Student Gardener.

Subsequent horticultural appointments were as follows: 1893-1895, gardener, and later journeyman, to the Baroness A. de Rothschild at Ferriers-en-Brie, near Paris, and Geneva, Switzerland; 1895-1901, Head Gardener to Lord Windsor at Hewell Grange, Worcestershire; 1901-1914, Head Gardener and Forester to Lord Windsor (later Earl of Plymouth) at St. Fagan's Castle, near Cardiff.

In the 1914-18 war he served as a commissioned officer in the Welsh Horse Regiment in France, and retired from military service in 1921 with the honorary rank of captain.

Captain Pettigrew returned to his former post at St. Fagan's Castle, where he remained until his retirement in 1935, when with Mrs. Pettigrew he went to live at Nice, in the south of France. In 1940, when Italy entered the war, it was necessary to make a hurried exit, and Mr. and Mrs. Pettigrew made a hazardous journey to this country on a coal boat crowded with British refugees. Returning to Nice after the war in 1945, he resided there until his death in 1947.

At Hewell Grange and St. Fagan's Castle, Captain Pettigrew was regarded as a member of the Plymouth household rather than as a servant, and he grew up with the young Earl as an intimate friend and adviser. He was exceptionally skilled in gardening and forestry, and was a fine organiser of men.

Captain Pettigrew was the second of three brothers, all of whom were old Kewites and noted horticulturists. Like their father, all were gifted men with wide interests and a high code of living. The eldest brother, Mr. W. W. Pettigrew, was perhaps in his day the ablest and best known Parks Superintendent in the country. The youngest, Mr. A. A. Pettigrew, was Parks Superintendent at Cardiff for 21 years.

W. NELMES.

AXEL LANGE

The Curator of the University Botanic Garden, Copenhagen, Mr. Axel Lange, died on February 13th, 1941. He was born on December 4th, 1871, at Frederiksberg, a suburb to Copenhagen, and was brought up in a home where the main point was an intense interest in botany, as his father, Professor Johan Lange, was a very keen botanist. The botanical atmosphere mentioned had early developed the very great interest for plants which he kept throughout his life.

Axel Lange began his horticultural education in the nursery belonging to Ledreborg Castle, Iceland, in 1888, and later was occupied in J. F. Kochs flower nursery at Copenhagen. After this practical experience he studied horticulture at the Royal Veterinary and Agricultural College of Copenhagen, from where he graduated in 1893 (first mark with distinction).

Before he went to Kew as a Student Gardener in 1895 he was engaged in the Botanical Garden of Copenhagen, and in the nursery of Hugh Low and Co., London. After leaving Kew the following year, he spent one year in the Botanical Garden of Bruxelles, and another year in Späths nursery, near Berlin.

From 1897 to 1900 he again was occupied in the Botanical Garden of Copenhagen, and from 1900 to 1902 in the Botanical Garden of Dahlem, near Berlin.

From November 1st, 1902, Mr. Lange was appointed Curator of the Botanical Garden at Copenhagen, and died only a month and a half before he had decided to retire after a little more than 38 years service in this position.

Mr. Lange was a very clever and peculiar stamped personality who had an unusual big store of knowledge, which has been of great value, as well as for Copenhagen Botanical Garden as for the botanical and horticultural societies and institutions in Denmark.

With all his efforts he strongly worked to develop and keep up a fine standard of the institution of which he was in charge.

The hobby of Mr. Lange was horticultural literature, horticultural history, and Danish plant names, of which he collected a very great number from all over the country.

Mr. Lange was a particularly diligent and careful writer—together with another Kewite of that time, Mr. Svend Bruun, he edited the book, "Danmarks Havebrug og Gartneri til Aaret 1919" (The History of the Danish Horticulture until 1919)—and he has been a collaborator of several garden books and dictionaries, besides writing and publishing a very great number (more than

170) of botanical essays, and several articles concerning horticulture. He was a big connoisseur of Begonias, and wrote "Geschichte der Begonien" (the History of Begonias) in K. A. Fotsch: *Die Begonien*, 1933. He determined *Begonia fuscumaculata* and *B. pseudophyllomamaniaca*, and two other Begonias have been named after him (*B. Langeana* Fotsch and *B. "Axel Lange"*).

He leaves a widow, one daughter and a son. He was a man of real greatness, and we few Kewites who knew him well are still mourning the loss of his engaging personality.

He was a life member of the Guild.

ERNST V. FLOTO.

W. W. PETTIGREW, V.M.H.

The death of Mr. W. W. Pettigrew, V.M.H., at the age of 79, occurred at Worthing on February 9th, 1947, and his passing will be regretted as he was held in high esteem by all who came in contact with him.

For many years his name was prominent in horticultural circles, particularly amongst public parks men, and there are many men holding important posts in public parks and other spheres of horticulture to-day who owe their success to his kindly advice and assistance. Mr. Pettigrew was a big man in every sense of the word and was always ready to lend a helping hand to any young man desirous of making progress in his profession.

He commenced his gardening career under his father at Cardiff Castle, and after several years training entered the Royal Botanic Gardens, Kew. On leaving Kew he spent a short time in well-known private establishments in Scotland, and in 1891, at the early age of 24, was appointed Superintendent of the Parks and Open Spaces at Cardiff.

In those days the standard of maintenance of public parks was very different from what it is to-day, and was principally confined to horticulture. Extensive provision for recreation was a later development.

During the 24 years he was in charge of the Cardiff parks, Mr. Pettigrew was instrumental in raising the standard of upkeep of the parks and, incidentally, of the conditions of the gardening staff employed in their department.

I can remember that at the time I was at Kew it was the ambition of many of the younger men who desired to take up public

parks work at the expiration of their time at Kew to obtain a post in the Cardiff Parks Department.

Mr. Pettigrew was a fluent lecturer, and had a gift for writing. He was a frequent contributor to the horticultural press, and whilst at Cardiff was, I believe, the first Superintendent to write a series of articles for the "Gardeners' Chronicle" on the management of public parks.

He was appointed to the position of General Superintendent of Parks and Cemeteries at Manchester in 1915, and held the post until his retirement in 1932. During his term of office in Manchester very great progress was made in the construction of new parks and playing fields and in the improvement of existing parks and open spaces. Much of this work was carried out in the decade 1920 to 1930, and was expedited owing to the necessity of providing work for the relief of unemployment during that period.

When food rationing was instituted during the 1914-18 war, Mr. Pettigrew was appointed Food Controller of Manchester, and carried out the duties of the office until rationing was abolished after the war, with success and to the satisfaction of all concerned.

Members of the Institute of Park Administration owe a special debt of gratitude to Mr. Pettigrew, who may be said to be the father of the Institute, as it was largely due to him that the Institute was founded in 1926 under its original title of the Association of Parks and Botanic Gardens Superintendents. For a number of years previously he had advocated the formation of an organisation for Parks Superintendents, but it was not until Mr. Blackburn agreed to take on the duties of Secretary that it was found possible to proceed with the project. From the time of its establishment Mr. Pettigrew took a very active interest in the affairs of the organisation and became its first President.

There is no need for me to outline the good work he did for the benefit of the members, as his activities in this respect are well known to all the older members of the Institute.

He was compelled by advancing years and the condition of his health to give up active connection with the Institute about 1940, but was retained as an Honorary Member of the Council in recognition of his past services to the Institute.

Mr. Pettigrew recognised the need for a book on the "Layout and Management of Municipal Parks," but it was not until five years after his retirement that the book was published in 1937.

J. RICHARDSON.

(Reprinted from the "Journal of Park Administration, Horticulture and Recreation.")

HARRY WOOD

Mr. Harry Wood was a native of Buxton and born in 1878.

He died on the 21st March, 1946, at Stockport, where he had gone to live on his retirement from the service of the Blackpool Corporation.

He commenced his career in the gardens of Corben Hall, where he spent five years, followed by one year spent as improver in the gardens of Long Hill House, Buxton, and two years in the nurseries of Messrs. Birks and Watts, Fairfield, Buxton.

He then entered Kew in 1899, staying until April, 1901, when he left to take up a position in Heaton Park under the Manchester Corporation Parks Department, where he eventually became Head Gardener.

He left Manchester to become Head Gardener to the Blackpool Winter Gardens Company, which position he held until he was called up in the 1914-18 war.

After his war service was over he secured an appointment in the Parks and Cemetery Department of the Blackpool Corporation as foreman in the cemetery, holding this appointment until his retirement in 1945.

(Taken from "Arnoldia." Vol. 6. June 7, 1946. No. 6.)

WILLIAM H. JUDD, PROPAGATOR

For 33 years William H. Judd has been propagating plants at the Arnold Arboretum. This long period of usefulness was cut short in the early hours of May 23 when he died unexpectedly of heart disease. He had just returned from the last meeting of the season of the Horticultural Club of Boston, reaching his home at 11 p.m., when his attention was attracted by a large fire not far distant. He apparently hurried to the fire, and it was while he was mingling with the spectators that he suffered the fatal heart attack. He had not complained of any serious illness and was up to the very end as keenly interested in his daily tasks at the Arboretum as he always had been.

Born on July 14, 1888, at Preston Brook, Cheshire, England, he was the son of the superintendent of a large private estate known as "The Oaklands." Naturally, in such an environment he developed an interest in gardening, and his earlier training undoubtedly included many a chore which one would expect to find on an estate of the time. At the age of 15 he commenced

his own gardening career in earnest, taking a position at Steven-ton Manor, Hampshire, England, where he worked from 6 a.m. until 6 p.m., his salary being 4s. a week.

He changed his positions several times during the next few years, as was apparently the custom among gardening apprentices in order to gain a rounded experience. He was always interested in the Royal Gardens at Kew, and many a holiday would find him off on some excuse to visit these famous plantings. Finally, in 1910, when he was 21 years old, he accepted a position there. The training he received during the next three years was of the utmost importance to him in later life. It was here that he learned the system of records which he was responsible for initiating at the Arnold Arboretum. It was here that he learned many of the gardeners' "tricks" which better prepared him to propagate the new and strange plants which came to him later at the Arnold Arboretum. Kew meant a great deal to Mr. Judd, and many of the things which he learned and practiced there he strictly followed through the years. New processes might be explained to him, new methods demonstrated, but he would always gauge them by the old "reliable" methods he had learned at Kew. The associations he had there lasted throughout his life. He was always intensely loyal to the United States and the Arnold Arboretum, but if anyone, even in jest, would so much as say a word against Kew and its trainees he was quick to take up the argument on behalf of what was his *Alma Mater*.

In June, 1913, he left Kew, coming to the United States to accept employment at the Arnold Arboretum in a position offered to him by Charles Sprague Sargent. He was immediately placed under the general supervision of that remarkable propagator Jackson Dawson. I wish I could have listened in on some of the conversations these two strong-willed characters must have had. Jackson Dawson had much to teach the new lad from England, and without a doubt it was absorbed quickly, until I think that student and teacher must have been on par. When Dawson died in 1916, Mr. Judd was given complete charge of all the propagating work at the Arnold Arboretum, an important responsibility which he assumed with eminent success until his death 30 years later.

This is yet too early fully to gauge just how valuable his efforts have been to the Arboretum and to horticulture in general. We undoubtedly owe him a very great deal, for when a packet of seeds reached the Arnold Arboretum greenhouses from some remote Chinese source, it was the propagator's responsibility to exert all his skill in order to coax at least a few of them to germinate. He was propagator during a period when the Arboretum was introducing tremendous numbers of plants from eastern Asia as well as from Europe. All of the seeds collected by Wilson on his 1917 and 1920 trips to eastern Asia were handled

by Mr. Judd, this being his sole responsibility. Thus the success of some of the Wilson introductions were to a certain degree due to the skill of Mr. Judd as a propagator. It is one thing to introduce the seeds of a plant new to horticulture; it is another matter to grow the plants and to test them under varying climatic conditions. Because of his painstaking nature, his excellent gardening training, and a highly developed experimental inquisitiveness, he was able to propagate many things where others would undoubtedly have failed.

He not only had "green fingers," but he knew the language of plants, and was always willing to talk about plants to anyone at any time. With amateurs he was courteous but often abrupt. With so-called "experts" he took delight in pointing out the mistakes they made in discussing certain plants. He was always in demand by those writing on horticultural subjects for he could easily and quickly point out errors that had escaped others. His advice was continually being sought by all types of individuals because of his phenomenal knowledge of plants. He would not hesitate an instant to tell a Director of the Royal Horticultural Society that he was wrong as to a certain point, while on the other hand he would be the first to commend some youngster who might have brought in some new or interesting specimen. His dry humour and quick wit made him famous in this country as well as abroad.

One of his most prized positions was that of Secretary to the Kew Gardeners of America, an organisation made up of men who took their early training at Kew and have since occupied responsible positions in various horticultural and botanical establishments in the United States and Canada. He was a life member of the Massachusetts Horticultural Society, and since 1921 has been in great demand as a judge at its more important flower shows. In 1931 he was awarded the Jackson Dawson Gold Medal of the Massachusetts Horticultural Society for his skill in the propagation of hardy woody plants. He was a past president of the Boston Gardeners and Florists Club, one of the most important groups of its kind in this country.

In 1945 he was awarded the Veitch Memorial Gold Medal by the Royal Horticultural Society, London, a high award made each year to a person who has distinguished himself for achievement in horticulture. Mr. Judd was very properly proud of this award, for it could not have been given to a more deserving person in the United States.

Mr. Judd was also a prominent member of the Masons, the Horticultural Club of Boston, the New England Botanical Club, and many other organisations, taking an active part in their deliberations. In any group where horticultural problems were under discussion he would express himself cogently regarding his

Arnold Arboretum experiences with a great variety of species, and when Judd spoke, his humour was always awaited with anticipation by those in the group who knew him.

He was easily one of the country's foremost authorities on ornamental woody plants. He liked to travel and always made it a point to keep extensive notes of his trips, the people he met, his experiences, and particularly the individual plants noted on such trips, especially those that he had propagated and distributed. He made frequent trips to Europe where he was distinctly a *persona grata* with the outstanding propagators in England, France, Holland and Germany, as well as with administrative heads of botanical and horticultural establishments, proprietors of private estates, wealthy amateurs, and professional horticulturists. When travelling became more restricted, he journeyed to the west coast of the United States. It is evident that he travelled largely to learn more about plants, and no matter where he turned up, he would make it a point to visit prominent plantsmen in that particular locality. He was continually making new friends for himself and the Arboretum, for he had to a remarkable degree that capacity of meeting people in all walks of life, impressing his personality on them, and of retaining their respect, esteem, and personal friendship.

His death is a very great loss to horticulture and especially to the Arnold Arboretum, for he is the last of the practical plantsmen on the staff of the Arboretum trained under the administration of Professor Sargent. His good nature, his dry wit, and his phenomenal knowledge of plants will be sincerely missed by his host of friends in this country and abroad.

DONALD WYMAN.

WILLIAM JACKSON BEAN, I.S.O., V.M.H.

The death of this old and distinguished Kewite took place at his residence in Mortlake Road, Kew, on April 19th, 1947, at the age of 82. Mr. Bean had been in failing health for over a year previous to his death.

He came from an old Yorkshire family and after serving in several good gardens, including those of Belvoir Castle, he entered Kew as a Student Gardener in April, 1883. After a time served in the Orchid Houses, he became Foreman of the Palm House. In 1887 he was appointed to the permanent post of Foreman of the Temperate Department, a position he held for five years. He was then transferred to the charge of the Arboretum embracing all the hardy tree and shrub collections of the Gardens.

In 1900 he was promoted as Assistant Curator of the Gardens, and on retirement of Mr. William Watson, he succeeded him as Curator in May, 1922, and finally retired from service in May, 1929, after serving 46 years at Kew.

Early in his career at Kew, Mr. Bean came under the notice of Mr. Watson, an astute and keen-eyed cultivator of a great variety of plants, and gifted with a sharp and discriminating eye of spotting men of talent and ability. His first ten years at Kew was served in the Houses under the control of Mr. Watson, who recognised his work by recommending him for the post to take charge of the Arboretum. The formation of the Bamboo Garden was one of the first large jobs he undertook and it proved very successful and a great feature of Kew. Under the guidance of Sir William Dyer, a tremendous number of changes were planned and carried out all over the grounds. A large number of old and common trees, and clumps of shrubs were cut down and the sites cleared and then planted with collections of species of all the larger genera of hardy woody plants. Thus, we find as a direct result of Mr. Bean's early work the groups of large numbers of species of *Acer*, *Malus*, *Crataegus*, *Prunus*, *Populus*, *Tilia*, *Betula*, *Quercus*, *Fraxinus*, *Aesculus*, *Magnolia*, *Celtis*, *Philadelphus*, *Spiraea*, *Cotoneaster*, *Rubus*, *Sorbus*, *Syringa*, *Berberis*, *Viburnum*, *Erica*, *Rhododendron*, and others of the smaller genera.

This system has helped considerably the study and comparison of many of these. It was the work of many years of careful planning in order to carry it out successfully. To add to the beauty of the Gardens, Mr. Bean initiated the planting of a number of large beds of prominent free flowering and berried shrubs all over the grounds. Each bed consisted of a different decorative shrub and for many years these were a great feature of Kew. Of late years many of these have become old and worn out and many have been abandoned or else replaced with plants of less decorative value.

Very early in his career at Kew, Mr. Bean took to writing articles on various horticultural subjects in the horticultural press, but for the last 40 years of his life he confined his attention to hardy trees and shrubs. He became one of the world's authorities on these. In 1908 he published a large volume on the "History and Development of the Royal Botanical Gardens, Kew." In 1914 he published his great work on "Trees and Shrubs Hardy in the British Isles," in two volumes. This work alone kept him busily occupied for over ten years of close study and hard work. He was most careful and methodical in all his technical descriptions of each species and each genus was separately dealt with. Owing to the remarkable and large number of new plants raised from seeds, and imported plants, from America, Japan and Central and Western China following the end of the war period of 1914-18, it became necessary to publish a third volume, and

this was published in 1933. The author's work was at once praised all over the horticultural world as the standard work of reference for all hardy trees and shrubs, and the work had a very large sale for all the great libraries and private gardens of Britain and United States.

For many years, Mr. Bean sat on many of the Committees of the Royal Horticultural Society, and regularly attended the meetings for over 40 years. He also frequently acted as a judge of their great flower shows. His quiet, dour manner, and his profound knowledge of trees and shrubs made him a general favourite at these meetings.

For his long services to the R.H.S. he was awarded the Victoria Medal of Honour, and also the Veitch Memorial Medal. The King, in 1924, appointed him to be a Companion of the Imperial Service Order. A very pleasing ceremony took place at the Garden Library on June 21st, 1928, when the members of the exclusive Garden Club assembled there to witness the unveiling of a life-sized portrait of Mr. Bean by the President of the Royal Horticultural Society, Lord Lambourne. This picture was painted by Mr. Ernest Moore, in oils, and was exhibited at a big exhibition of paintings of famous Yorkshiremen in London. It was purchased by Major Reginald Loder and presented on behalf of the Garden Club to Kew to perpetuate the memory of one of her famous men. It is a striking portrait of Mr. Bean at the height of his career, and is now hung in a central position in the Garden Library. A photographic copy of the portrait is reproduced herewith.

Mr. Bean married rather late in life and has a son and daughter. His wife predeceased him.

C. P. RAFFILL.

ALLAN BEARD

The tragic death of Allan Beard at the age of 31 came as a great shock to his many friends at Kew, and also at Stamford Park, Ashton-under-Lyne, where he had been a member of the park's staff before joining H.M. Forces.

Mr. Beard was one of the first young men to enter Kew under the Government vocational training scheme, taking up his duties on August 6th, 1946, and in advance of the official starting date.

He was a young man with a promising career in horticulture and extremely popular with all who knew him, particularly the Superintendent (Mr. A. Falconer) and staff at Stamford Park. He joined the Parks Staff as an apprentice gardener in 1934.

In the spring of 1939, with other members of the staff, he joined the 6th Battalion of the Cheshire Regiment (Hyde Company) T.A., and was mobilised three days before the outbreak of war. He served in the Cheshires until October, 1939, transferred to the Middlesex Regiment and proceeded with them to France in 1940. After taking part in the fighting in France and Belgium, he was evacuated from Dunkirk, and continued to serve with the battalion when it was reformed.

Always fond of motor-cycles, he gave up chances of promotion to become a despatch rider. It was while serving near Canterbury in 1943 that he was involved in a serious accident, being knocked off his machine by an army lorry. After a period in hospital he made a recovery and served with a holding battalion in London before being granted his discharge on medical grounds.

Mr. Beard returned to Stamford Park as a gardener in June, 1944, and continued to work in the department until taking up his duties at Kew in August, 1946.

ERNEST PHILIP LONG, A.H.R.H.S.

We deeply regret to record the death of Mr. Ernest P. Long on November 25th, 1947. Mr. Long was born in 1878 at Wilton, Wiltshire, and commenced his horticultural career in the gardens of Lord Pembroke at Wilton Park. His ambition to enter the Royal Botanic Gardens, Kew, as a Student Gardener, was realised in March, 1900. After serving in several departments he left Kew in November, 1902, for India to take up the appointment of Superintendent of the Government Gardens at Simla and Delhi, a position he held until 1933 when he retired from the service.

Mr. Long was a very keen bryologist and possessed a very large collection of Indian mosses and lichens, comprising in all some 400 specimens. Some species of these were unknown when collected and Mr. Long was honoured by having several of them named after him.

He was a Fellow of the Royal Horticultural Society for many years, and in 1931 the Council of the Society awarded Mr. Long the Associateship of Honour for his services to horticulture.

FREDERICK AMOS HEATH

We regret to record the death on Monday, January, 28th, 1946, of Mr. Frederick A. Heath following an operation for strangulated hernia. Mr. Heath entered Kew as a Student Gardener on June 20th, 1898, and after 14 months service he was promoted to the position of sub-foreman in charge of the Temperate House Propagating Pits.

He left Kew on 30th March, 1901, and returned to work at Ross Lodge Gardens, Grange Road, South Norwood, where his father was Head Gardener. Mr. Heath remained as gardener at Ross Lodge until his retirement a few years ago.

Mr. Heath was a keen bowler and acted for many years as Secretary to the Grange Wood Bowling Club. He was also an active member of the local Oddfellows' Club. To his widow we desire to extend our sympathy in her irreparable loss.

HENRY WILLIAM STENNING

Kewites of 1920-22 vintage will learn with regret of the death on June 5th, 1946, of Henry William Stenning after a long and terribly painful period of ten weary months in hospital. During the war he was a Civil Defence Training Officer, and it was while handling drums of chemicals that he received the injury which led to the amputation of his leg, and ultimately to his death.

He had a varied horticultural career. Starting at the Duke of Devonshire's place at Compton Place, Eastbourne, and following up with a general experience in good private gardens, he came to Kew in 1920. His training fitted him for the decorative department, and most of his two years were spent in No. 4. On leaving Kew he went back into private employment and was Head Gardener for varying periods first at Ebrington Hall, Campden, Gloucestershire, then at Wadley Manor and Buscott Park, both near Faringdon. From there he went for a time as Horticultural Instructor at the Army Vocational Training Centre, near Swindon, and some 11 years ago became Head Gardener to St. John's College, Oxford. Here he took charge of the noted Rock Garden, one of the earliest to be built in Britain, and the interesting collection of trees and shrubs. He was a frequent contributor to the local newspapers on horticultural topics, and to the horticultural press. He also gave a series of talks on the radio on the Midland wave length. An experienced flower show judge, he was well known in the Midlands, and will be greatly missed by a wide circle of friends. He was laid to rest in the Botley Road Cemetery, Oxford, quite close to his home, the writer, a contemporary of his, having the sad duty of representing Kew. To his widow, all members of the Guild will, I know, extend their sympathy.

G.W.R.

ERNEST HEWITSON

The death of Ernest ("Ginger") Hewitson, will have caused great sorrow to his many friends, especially Kewites who served their time in Kew during the years 1928 to 1931. That one so active should be taken in the early forties was a great surprise to those who knew his dynamic character and seemingly unlimited energy. He suffered a great deal during the latter 18 months of his life, being partially paralysed, due to a tumour on the brain. His inability to talk and relieve his feelings must have been a great trial to him, as it was to friends who visited him. Nevertheless, he spared no effort to get well again, and if will-power could have kept him going, there is no doubt he would have soon fully recovered.

He went to Kew in 1928 and like all students, passed through the training scheme and served in several departments. As foreman in the Rock Garden he helped to reconstruct the central portion of the garden, under Mr. A. Edwards (now Superintendent of Parks at Salford), who was then Assistant Curator in charge of the Herbaceous Department.

Being a keen sportsman he took part in all forms of games and did well in running and swimming, to mention two. He always attended the "mutual," and in after life was heard to state that his training there in public speaking stood him in good stead.

He left Kew in 1931 and took up a post with the Fleetwood Parks Department, Lancashire, subsequently being appointed Superintendent, where he remained until he passed away. During his service with this corporation many plans for reclaiming the sandy foreshore for gardens and other amenities were carried out and stand to-day as a record of his achievements.

He always kept Kew to the forefront and employed "trained men" on every possible occasion. Many a Kewite owes him a debt of gratitude for his efforts in putting them on the ladder to success in the parks' world.

He would not wish anyone to mourn his passing, but it is a certainty that all who knew him will wish to pass on to his wife and daughter who remain behind, their message of sympathy in their sad bereavement.

Requiescat in pace.

R. H. MASON.

KEW STAFF LIST

*Life Member of Guild.

†Formerly a student gardener at Kew.

DIRECTOR'S OFFICE		Entered Kew
Director	*Sir E. J. Salisbury, C.B.E., D.Sc., F.R.S.	1943
Economic Botanist	*Sir Geoffrey Evans, C.I.E., M.A. ...	1938
Staff Officer	S. F. Ormsby	1923
Shorthand-Typist	Mrs. A. M. E. Kendall	1947
Clerk	H. R. Middlemost	1937
"	Mrs. M. L. Pelaez	1946
HERBARIUM AND LIBRARY		
Keeper (Senior Principal Scientific Officer)	W. B. Turrill, D.Sc., F.L.S.	1909
Deputy Keeper (Principal Scientific Officer)	*Miss E. M. Wakefield, M.A., F.L.S.	1910
Principal Scientific Officers	V. S. Summerhayes, B.Sc.	1924
" " "	F. Ballard, B.Sc.	1929
" " "	N. Y. Sandwith, M.A., F.L.S. ...	1924
" " "	†C. E. Hubbard, F.L.S.	1920
" " "	E. W. B. H. Milne-Redhead, M.A.	1929
Senior Scientific Officers	H. K. Airy Shaw, B.A., F.L.S. ...	1925
" " "	A. A. Bullock, B.Sc.	1929
" " "	R. W. G. Dennis, B.Sc., Ph.D. ...	1944
" " "	*B. L. Burtt, B.Sc.	1931
Scientific Officer	R. D. Meikle	1947
Experimental Officers	†Ernest Nelses	1920
" " "	Miss C. I. Dickinson, M.A., Dip. Agric., F.L.S.	1929
Assistant Experimental Officer	Miss P. Lewis	1947
Assistant Botanist	*J. R. Sealy, B.Sc.	1927
Botanical Artist	Gerald Atkinson	1922
" " "	Mrs. J. R. Sealy, F.L.S. (Miss S. Ross-Craig)	1929
Librarian	H. S. Marshall	1932
Botanist for South Africa	P. H. B. Talbot	1945
Botanist for India	D. Chatterjee, M.Sc., Ph.D.	1946
Sub-Assistant	Miss Mabel I. Skan	1919
"	F. C. Woodgate	1922
"	R. A. Blakelock, B.Sc.	1937
Clerical Officer	Miss D. P. F. King	1935
Assistant (Temporary Technical)	Miss S. Wilson	1924
" " "	Miss M. C. Davey	1918
" " "	Miss I. Halliday	1947
Typist	Miss M. J. Kierans	1934
"	Miss M. M. Sillitoe	1947
Preparer (Herbarium)	Mrs. V. A. Feddern	1941
" " "	Miss J. Forster	1947

MUSEUMS		<i>Entered Kew</i>
Keeper (Principal Scientific Officer) ...	+John Hutchinson, LL.D., F.L.S. ...	1940
Principal Scientific Officer	F. N. Howes, D.Sc.	1926
Senior Scientific Officer	R. Melville, B.Sc., Ph.D.	1934
Preparer	L. J. Harding	1913
Typist	Miss B. Saunders	1943

JODRELL LABORATORY

Assistant Keeper (Principal Scientific Officer)	C. R. Metcalfe, M.A., Ph.D.	1930
Assistant Experimental Officer	Miss E. M. Slatter	1946
Laboratory Assistant	F. R. Richardson	1934

THE GARDENS

Curator	+W. M. Campbell, N.D.H., F.Inst.P.A.	1922
Assistant Curators—		
Arboretum	+S. A. Pearce, F.Inst.P.A.	1928
Tropical Department	+Lewis Stenning	1925
Temperate Department	*+C. P. Raffill, M.B.E., V.M.H., A.H.R.H.S.	1898
Decorative Department	Miss E. V. Paine, N.D.H. (Acting)	1940
Alpine and Herbaceous Department (Clerk, Higher Grade)	+G. H. Preston	1934
Clerical Officer	+Ernest G. Dunk	1914
" "	Miss D. A. Wheeler	1945
" "	W. E. Gray	1942
" "	C. F. Norman	1927
Shorthand-Typist	Miss P. Bowman	1946
" "	Mrs. E. L. Stevenson	1947
Sergeant-Constable	G. E. Williams	1906
Packer and Storekeeper	+H. W. Ruck	1907

FOREMEN

<i>Department</i>	<i>Name</i>	<i>Entered Kew</i>	<i>Previous Situation</i>
Rock Garden	L. R. Brown ...	20 Sept., 1937	Hyde Park, London.
Ferrieries	B. L. Perkins ...	4 May, 1936	Manchester Parks Dept.
Temperate House Pits .	W. Bridle	11 March, 1946	H.M. Forces.
Orchids	S. Rawlings	20 July, 1936	Parks Dept., Salford.
Botanics	C. G. W. Gardner	1 Feb., 1926	Chatsworth House Gardens Derbyshire.
Arboretum	C. F. Coates ...	25 Sept., 1915	Manor Park, Pottton, Beds.

STUDENT GARDENERS

<i>Name</i>	<i>Entered Kew</i>	<i>Previous Situation</i>
Boyle, James	10 July, 1939	W. A. Constables Nurseries, Tunbridge Wells.
Butters, Keith	25 Aug., 1947	Reading University.
Childs, Raymond	1 Oct., 1946	Bournemouth Corporation Parks.
Foat, Charles, D.	30 Sept., 1946	Parks Department, Margate.
Johnson, Gordon	25 Aug., 1947	Brocklesby Park, Habrough, Lincs.
Hingston, James A.	15 Aug., 1946	Royal Navy.
Lavender, Frank R.	14 Oct., 1947	Cookham Nurseries, Berks.
Larkbey, Frederick A.	9 June, 1947	Samsow Gardens, Clive, Shrewsbury.
Rodick, Peter W.	16 Sept., 1946	Corporation Parks and Gardens, Liverpool.
Rolls, Edward V. S.	30 Sept., 1946	Parks Department, Brighton.
Slade, Walter J.	26 June, 1939	Trent Park Gardens, Herts.
Storey, Edward W.	1 Oct., 1946	Parks Department, Manchester.
Senogles, Frank	16 Sept., 1946	Cheshunt Research Station.
Wray, Edward V.	1 July, 1946	H.M. Forces.
Ward, Osmond J.,	1 Oct., 1946	Parks Department, Warrington.
Taylor, John O.	18 Mar., 1946	Royal New Zealand Navy.
Mitchelmores, Cyril J.	16 April, 1945	Manchester City Parks.
Woodward, Arthur	22 Oct., 1945	H.M. Forces.

TEMPORARY FOREMEN

<i>Department</i>	<i>Name</i>	<i>Previous Situation</i>
Tropical Pits	H. Collins	Forestry Commission, Gravetye.
Palm House	G. Anderson	Channel Islands.
Temperate House		

WOMAN DEMONSTRATOR

<i>Name</i>	<i>Entered Kew</i>	<i>Previous Situation</i>
Sanders, Irene	23 Aug., 1943	The Priory, Orpington, Kent.

WOMEN GARDENERS

<i>Name</i>	<i>Entered Kew</i>	<i>Previous Situation</i>
Eperon, Kathleen, N.D.H. ...	11 Dec., 1944	Hampshire County Council.
Kelly, Eileen, F.	26 Aug., 1940	Botanic Gardens, Glasnevin, Dublin.
Ryodkowska, Irene	20 Oct., 1947	Horticultural Institute, Usk, Monmouth.
Periam, Rosalie	17 Nov., 1947	Poppyland Nurseries, Sheringham, Norfolk.
Western, Pauline	17 Nov., 1947	Royston, Halland, Sussex.

IMPROVER GARDENERS AND BOYS

Brimacombe, G.	Nelmes, R.
Butcher, J. A.	Parker, H. H.
Dowse, W.	Perathroner, K.
Glazebrook, A. K.	Parry, J.
Mason, F.	

TRAINEE GARDENERS, 1946 AND 1947

<i>Name</i>	<i>Entered Kew</i>	<i>Previous Situation</i>
Brown, George, E.	29 July, 1946	H.M. Forces.
Baker, Maurice E.	1 Oct., 1946	N.E. Essex Div. Executive.
Carr, Oliver	1 Oct., 1946	King's College, Newcastle-on-Tyne.
Davenport, William H.	2 Aug., 1946	Gardens Department, Congleton.
Edwards, John H.	1 Oct., 1946	Ready Token, Cirencester.
Graham, Arthur	24 June, 1946	H.M. Forces.
Garwood, Tom	1 Oct., 1946	Corporation Parks, Stockport.
Harris, F. G.	1 Oct., 1946	Sutton and Sons, Reading.
Horne, W.	1 Oct., 1946	Westminster Parks Department.
Rigby, Joseph B.	1 Oct., 1946	Warrington Parks Department.
Straughan, Robert E.	29 July, 1946	W. N. Hall and Sons, West Heddon.
Starkey, William	1 Oct., 1946	Parks Department, Liverpool.
Wall, Robert G.	1 Oct., 1946	The Arboretum, Walsall, Staffs.
Ward, John	1 Oct., 1946	Warrington Parks Department.
West, David R.	1 Oct. 1946	Higherend, Penmark, Barry, Glamorgan.
Young, Peter	30 July, 1946	Parks Department, Epsom and Ewell.
Borret, Arthur H.	15 April, 1947	Green Bank, Grimesburgh, Wool- bridge, Suffolk.
Edwards, Dennes G.	8 April, 1947	Thorpe Hall, Thorpe-le-Soken, Essex.
Grant, Eric A.	4 April, 1947	Council Offices, Stanmore, Middlesex.
Helm, John D.	4 April, 1947	Clifton Castle, Ripon, Yorks.
Himson, Arnold	4 April, 1947	United Automobile Services, Darling- ton.
Ison, John H.	8 April, 1947	Parks Department, Derby.
Jackson, Thomas	8 April, 1947	Oswoldtwistle U.D.C. Parks Dept. .
Lockley, Ralph E.	9 April, 1947	Parks Department, Derby.
Lingard, Henry M.	9 April, 1947	Parks Department, Manchester.
Lovatt, Donald W.	9 April, 1947	Hammersmith Borough Council.
Medcalf, John G.	9 April, 1947	Parks Department, Sunderland.
Rodick, Robert S.	9 April, 1947	Corporation Parks and Gardens, Liverpool.
Tweedale, Frank	27 Jan., 1947	H.M. Forces.
Thompson, George	8 April, 1947	H.M. Forces.
Waumsley, Norman	9 April, 1947	The Park, Pudsey, Yorks.
Allen, Frank H.	28 Oct., 1947	Tortworth Estate Co., Falfield, Glos.
Constable, Frank	2 Oct. 1947	City Parks, Leeds.
Cox, Harold	2 Oct., 1947	Gunn and Sons, Olton, Warwick.
Dayson, Frederick E.	2 Oct., 1947	Parks Department, Burslem.
Hughes, John C.	2 Oct., 1947	Parks Department, Torquay.
Jackson, Richard M.	2 Oct., 1947	Parks Department, Bristol.
Jackson, Francis A.	2 Oct., 1947	Dunham Massey, Cheshire.
Mahon, Leonard A.	2 Oct., 1947	Wood's Nurseries, Taplow, Berks.
Nicholson, George E.	2 Oct., 1947	Digby Stuart Training College, Roehampton.
North, Frederick G.	2 Oct., 1947	Sutton and Sons, Reading.
Smith, William S.	2 Oct., 1947	Sandringham Gardens, Norfolk.
Turley, Philip G.	2 Oct., 1947	Parks Department, Birmingham.
Turley, Alfred G.	2 Oct., 1947	Parks Department, Birmingham.
Templeton, James	2 Oct., 1947	Parks Department, Bexley Heath.

TEMPORARY GARDENERS

<i>Name</i>	<i>Entered Kew</i>	<i>Previous Situation</i>
Coutinho, S.	18 May, 1942	Hamburg Botanic Gardens.
Mullins, W.	28 Sept., 1942	The Gardens, Pain's Hill.
Sutch N. W.	15 May, 1944	R.A.F.

ADDRESS LIST OF OLD KEWITES

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

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

Name	Left Kew	Present Position and Address
Abbing, J.	Nov. 1936 ...	Beauweu Park, P.B., Grahamstown, S. Africa.
*Abbott, James M.	Sept. 1898 ...	Guinness Farm, Hoebridge, Old Woking, Surrey.
*Adamson, John	July 1909 ...	N. Dunreggan, Moniaive, Dumfriesshire.
Adams, Miss D.	Aug. 1945 ...	c/o East Malling Research Station, nr. Maidstone, Kent.
Addison, G. H.	May 1938 ...	Botanic Gardens, Singapore, S.S.
*Agate, C. J.	April 1926 ...	21, Hayden Avenue, Great Neck, Long Island, N.Y., U.S.A.
*Aikman, Miss M. G.	Nov. 1924 ...	40, Mortlake Road, Kew, Surrey.
*Airey, J. E.	May 1939 ...	Tynedale Nurseries, Greenside Road, Crawcrook, Ryton-on-Tyne.
*Albert, Mrs. H.	Mar. 1945 ...	47, Arctic Street, Oyster Bay, New York, U.S.A.
*Alcock, Mrs. N. L., M.B.E., F.L.S.	Nov. 1918 ...	61, Holywell, Oxford.
Alcock, R. M.	Mar. 1930 ...	Address unknown.
*Allen, C. E. F.	Feb. 1904 ...	Address unknown.
Allison, B. W.	Jan. 1930 ...	Asst. Supt., Parks Dept., Salford, Lancs.
Allen, Miss B.	Jan. 1946 ...	11, Church Avenue, Harrogate.
*Allt, W. S.	Jan. 1911 ...	E. Market Street, Hyde Park, New York, U.S.A.
Alston, A. H. G., M.A.	June 1925 ...	British Museum (Nat. Hist.), S.W.7.
*Ambrose, Miss R. M.	Dec. 1945 ...	c/o Empire Potato Collection, Imp. Bureau Plant Breeding and Genetics Cambridge.
Andrews, R. H. ....	...	120, Harewood Avenue, Bournemouth, E.
*Anderson, A. W. C., N.D.H. (N.Z.)	Feb. 1926 ...	S., Parks and Reserves, Timaru, N.Z.
*Anderson, J. W. ....	...	Granta, Bucklesham Road, Ipswich.
*Andrews, W. G.	Oct. 1922 ...	H.G., Tresco Abbey, Scilly Islands.
Armitage, Miss M. A.	Feb. 1945 ...	8, Broomfield Road, Kew Gardens, Surrey.
Armstrong, C. E. ....	...	Assistant Horticultural Instructor, Northamptonshire Institute of Agriculture, Moulton, nr. Northampton.
*Arnold, T. A.	Jan. 1931 ...	157, Jeppe Street, Johannesburg, South Africa.
*Ashby, Mrs. D. (F. A. Sharps) ....	...	c/o Pest Control (Rhodesia), Ltd., Salisbury, S. Rhodesia.
Ashlee, T. R., B.S. (Ed.). ...	April 1910 ...	R.F.D. 2, Box 24, Bremerton, Wash., U.S.A.
Atkins, L. G., N.D.H.	Oct. 1931 ...	Farm School, Newton Rigg, Penrith, Cumberland.
*Aubrey, A. E.	April 1910 ...	The Woodhouse Gardens, Grange Road, Tettenhall, Wolverhampton.
Avery, Edwin	Feb. 1946 ...	Les Glaieuls Golfe, Juan, France (A.M.).
Aves, J. J.	Aug. 1939 ...	Address unknown.

general nature transacted. The Annual General Meeting shall be followed by 'a tea.

- 10—There shall be a voluntary Benevolent Fund for the purpose of helping Kewites who may be in urgent need of pecuniary assistance.
- 11—Unpaid volunteer Students shall be eligible for Associate Membership of the Guild, provided always that they have paid a minimum life subscription of £3 3s. 0d. (payable in advance) entitling them to such privileges as detailed in Rule 7, and have completed not less than 12 months' service at Kew.
- 12—The Rules shall not be altered except by a two-thirds majority at the Annual General Meeting. Any proposals for the alteration of Rules shall be sent to the Secretary in writing at least twenty-one clear days before the date of the Annual General Meeting, and shall be sent by him to members resident in the United Kingdom at least seven clear days before the date of the Annual General Meeting.

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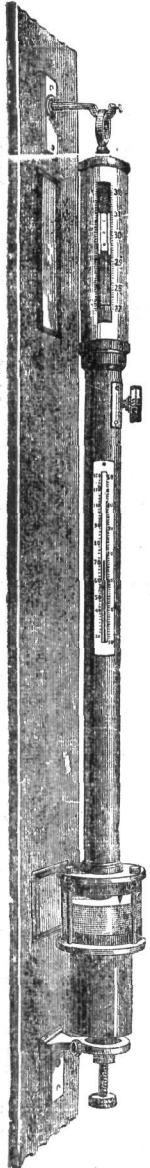
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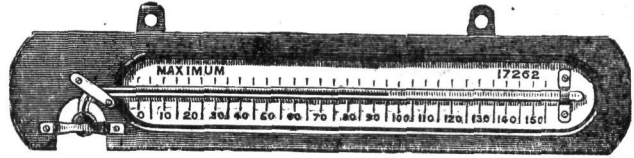
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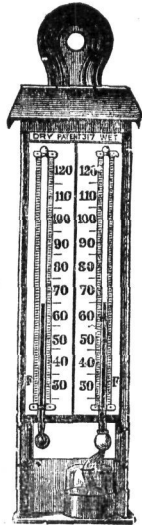
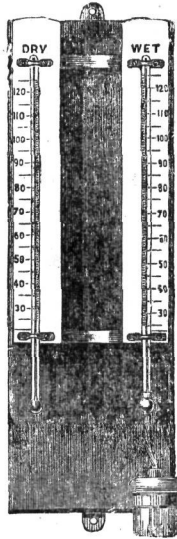


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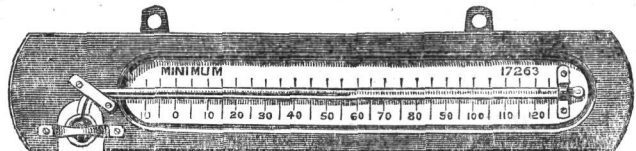
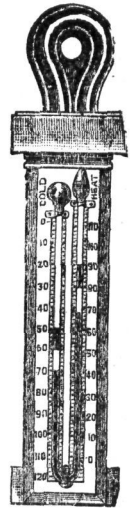
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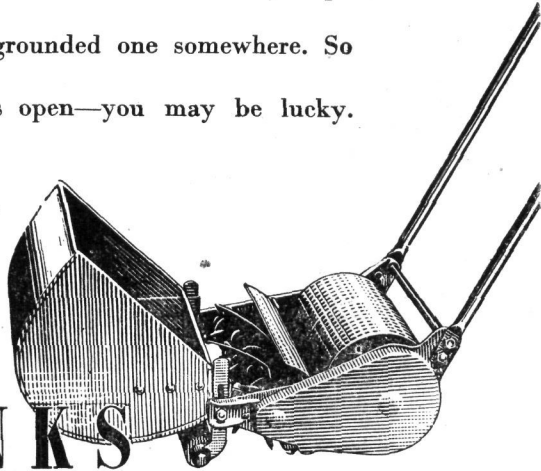
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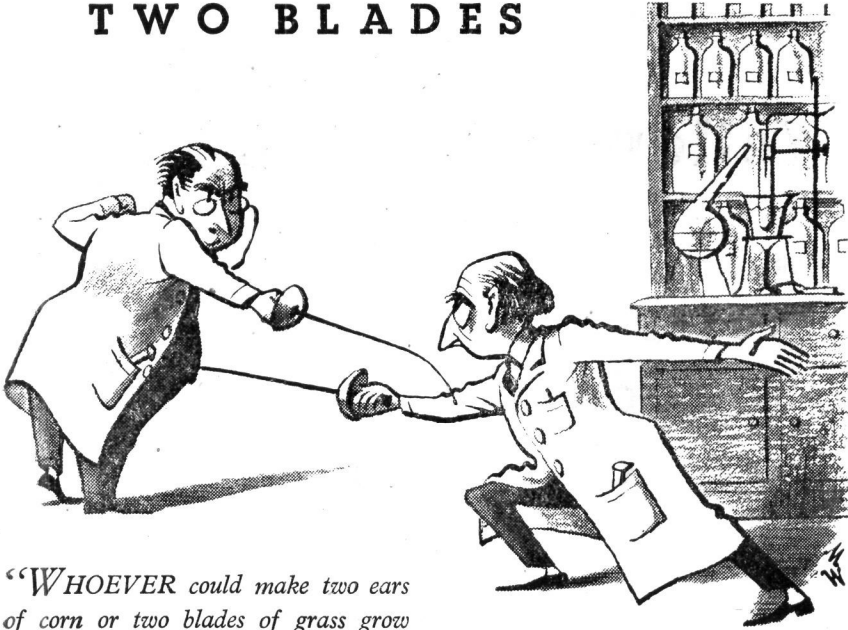
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