At the dawn of 1915, when the eyes of the whole world are turned on Belgium, it is particularly fitting that the President elect of the Kew Guild should be a son of that gallant country. The selection of M. Louis Gentil, however, is not inspired by feelings of entente. He is also one of the "Sons of Kew" who have made their mark in the world of horticulture. Few men of note follow the vocation of their earlier days, but M. Louis Gentil is one of the exceptions, for the wish to garden professionally has been his since early childhood. After having received a sound education, which included Latin and drawing. in preparation for his future career, he entered the School of Horticulture at Tournai, Belgium, remaining for 3½ years and being "first in examinations." Soon after finishing his course he came to London, to find employment for 6 months in the Petersham Nurseries, following this with 18 months in Messrs. James Veitch & Sons' nursery at Chelsea. He entered Kew in May 1896, where our friend's skill as a plantsman soon attracted attention. When he first came to England M. Gentil had little more than a schoolboy's knowledge of the English language and despaired of ever mastering it, because, as he wrote home, "the English speak so quickly." But during his Kew days he had become so conversant with English that he not only was able to write highly creditable résumés of the lectures but read a paper at the "Mutual" on "The Propagation of Plants," and was also an occasional contributor to the Gardeners' Chronicle. At the same time he wrote regularly to La Semaine Horticole and other gardening periodicals printed in French. He left Kew in September 1897, to become Director of the Coffee and Cocoa Plantations at Equatorville, Congo, West Africa. The Journal of 1898 contains a racy account of his journey to the "Belgian Cemetery." His keenness, energy, and ability soon obtained recognition and his promotion to be Inspecteur Forestier of the Congo State. He did so well in this capacity that in less than two years he was appointed by the Belgian Government Curator of the Botanic Gardens at Brussels, and since his return to Europe has done much good work in those Gardens. It is always the busy man who finds time to do things, so M. Gentil, amongst other work, edits the Tribune Horticole. Of the future of M. Gentil and the Brussels Botanic Garden who can say? News from his stricken country percolates but slowly. A letter from the Guild sent via Holland the first week in November has been returned after two months' wandering, but a young Belgian who left Brussels at Christmas brought a card from M. Gentil with seasonable greetings to Mr. Watson. He writes, "I am still alive, working, but for no salary. Our Government, I believe, is somewhere in France. Hurrah for England! Here we trust entirely in England." This sticking to it in the face of almost overwhelming adversity is characteristic of the man. From his father, a well-known musician in Liége, now of immortal fame, he inherited much of the exuberance and excitability which is part of the Belgian temperament. His mother was an English ladv. and from her came a leavening of stubbornness and imperturbability. M. Gentil was born in October 1874. A. C. B.

ANNUAL REPORT.

(1913-1914.)

In presenting the Annual Report for the year ending April 30, 1914, the Committee have pleasure in stating that the affairs of the Guild are generally satisfactory.

The receipts for the year amount to £60 9s. 6d., including 19 Life Subscriptions. The total number of Life Members is now 317. The expenditure for the year is £47 15s. $6\frac{1}{2}d$.

The Annual General Meeting was held at the Holborn Restaurant, when the new rules, submitted by the special sub-Committee appointed for that purpose, were adopted with slight alterations.

The Committee commend Rule 6 to the notice of those Members whose subscriptions are in arrears.

The Annual General Meeting was followed by a Dinner, when Mr. W. Goldring presided over a large attendance. Arrangements have been made for the Dinner, 1914, to be held at the Holborn Restaurant as in former years, and Mr. A. W. Hill has kindly consented to take the Chair.

The Committee express their appreciation of those Members who have sent communications to the *Journal*, and the Secretary will be glad to receive notice of any changes of address in order to keep the Directory as complete as possible.

The members of the Committee who retire this year under Rule 4 are: Messrs. R. A. Rolfe, R. L. Harrow, W. Hales, and J. Weathers. Messrs. J. Hutchinson, A. Hosking, F. W. Harvey, and C. H. Curtis have been duly proposed to take the places of the retiring members of the Committee, and Messrs. F. Glover and C. Boff are recommended to represent the sub-foremen and gardeners respectively.

Messrs. A. Osborn and E. Allard are recommended as Auditors for the ensuing year.

The Committee regret to have to report the death of Miss J. J. Clark, formerly a member of the Herbarium Staff.

The Committee invite members to inform the Secretary should they be in need of employment, or if they know of situations which Kewtrained men might fill. The Benevolent Fund continues to increase in usefulness. The appeal made on behalf of Mr. W. Crisp is meeting with a ready response, and arrangements are being made for a regular weekly sum to be paid, but further subscriptions will be needed if the pension is to be maintained.

The Committee desire to be informed of any case in which assistance, pecuniary or otherwise, might be rendered to a Kewite.

Balance Sheet, 1913-1914.

Receipts,	Expenditure.
£ s. d.	£ s. d.
Balance from 1912–13 36 3 $6\frac{1}{2}$	Journal Printing A/c 30 13 0
Life Subscriptions 19 0 0	Postage and Carriage 5 9 3½
Annual Subscriptions and Sales 14 4 9	Deficit on Dinner and Annual General Meeting 0 4 6
$ \frac{\text{Interest on } £300 \text{ New South}}{\text{Wales Stock } \dots} $ 9 17 10	Expenses
Interest on Deposits in Post Office Savings Bank	Secretary and Editor's Honorarium
Advertisements in Journal 16 10 0	Balance in hand 48 17 6
$\pounds 96 \ 13 \ 0\frac{1}{2}$	£96 13 04
Anna College C	***************************************

Capital Account.

Liabilities.	Assets.
£ s. d.	£ s. d.
Thomson Bequest 92 8 6 To 317 Life Subscribers at)	$\left\{\begin{array}{cccc} *£300 \text{ New South Wales} \\ 3\frac{1}{2}^{0}/_{0} \text{ Stock} & \end{array}\right\}$ 300 0 0
the two-thirds rate as per Rule 7, 1913	Deposit in Post Office Savings Bank
Balance of Assets 47 12 4	Advertisements due 2 10 0
	Cash in hand—with Secretary, 16s. 5d.; with 1 7 1 Treasurer, 10s. 8d
£351 7 6	£351 7 6

^{*} New South Wales $3\frac{1}{2}9/_{0}$ Stock is redeemable at par, but now stands at $96^{\circ}/_{0} = £288$, and was purchased at £315.

Compared with Vouchers, Bank-book, Stock Receipt, etc., and found correct, May 13th, 1914.

Auditor's Statement:—The total Liability is £303 15s. 2d. Taking away the Thomson Bequest of £92 8s. 6d. from capital invested we have £207 11s. 6d. The two-thirds of 317 Life Subscriptions is £211 6s. 8d., which leaves a liability of £3 15s. 2d. We recommend that £25 from the balance (at the Post Office Savings Bank) be invested as per Rule 7 to completely cover the liabilities.

Benevolent Fund.

		19	- 1
Grant to W. Crisp			
Grant to W. Crisp	£	s.	d.
	Expenditure.		

As the result of the appeal on behalf of Mr. W. Crisp, £13 9s. 0d. has been subscribed up to May 13th.

Dinner Account.

Receipts.		Expenditure.			
£ s. c	d.		£	s.	d.
Subscriptions at 4s. 6d 15 10	6	92 Dinners at 3s. 6d	16	2	0
Polomos from Cuild	6	Printing and Addressing Envelopes		11	6
Funds	6	Postage, 'Phone, and Telegram		11	0
		Freight etc. on Decorations.		16	0
		Pianist		10	6
		Head Waiter		10	6
£19 1	6		£19	1	6
	-		-	-	especial in the last of the la

ANNUAL GENERAL MEETING.

THE Annual General Meeting of the Guild was held at the Holborn Restaurant on May 20, 1914. The President, Mr. WILLIAM GOLDRING occupied the Chair, and there was a large attendance of members.

The Annual Report and Balance Sheet were read by Mr. H. COWLEY, the Secretary. These recorded a satisfactory state of affairs, and were unanimously adopted.

In accordance with Rule 4 the following members of the Committee retired: Messrs. W. Hales, R. L. Harrow, R. A. Rolfe, and J. Weathers; their places were filled by the election of Messrs. C. H. Curtis, F. W. Harvey, A. Hosking, and J. Hutchinson. Mr. H. Cowley was reelected Secretary and Editor, and Mr. J. Coutts, Treasurer. Messrs. E. Allard and A. Osborn are the Auditors.

Mr. Coutts suggested the election of a limited number of Honorary Members of the Guild. Mr. Goldring supported the idea, but hoped the honour would not be made too cheap. Mr. A. W. Hill trusted that Honorary Members would not be elected for mere pecuniary gain to the Guild. Messrs. W. Dallimore, R. I. Lynch and A. C. Bartlett also took part in the discussion. Eventually, on the motion of the Chairman, seconded by Mr. C. P. Raffill, the matter was left for the Committee to consider during the ensuing year.

The Secretary reported that the special appeal made on behalf of Mr. W. Crisp, who was now totally incapacitated for work, had met with a ready response, but further subscriptions were needed.

The question of defaulting subscribers was mentioned, and incorrect addresses in the Directory were discussed. With regard to the latter it was pointed out that the Directory could only be kept "up to date" by Guild members notifying changes to the Secretary.

A vote of thanks to the retiring President, Mr. W. GOLDRING, brought the meeting to a close, and the members adjourned to the dining hall.

THE DINNER.

THE Committee having failed to persuade the new President, Mr. W. J. BEAN, to occupy the chair at the dinner, Mr. A. W. HILL (Chairman of Committee) presided. The loyal toasts having been duly honoured, Sir Frederick Moore, M.A., V.M.H., rose to propose the toast of the evening, "The Kew Guild." The speaker opened his remarks by saying that his great pleasure in being present that evening was tinged with the sincere regret that his father in his youth had sent him to the Continent instead of to Kew. He felt convinced that while experience on the Continent is very helpful to the British gardener, from personal experience home horticulture is superior to that abroad, and speaking from a wide knowledge, Kew is the finest garden in the world. The many privileges enjoyed by the young men at Kew gave them an enormous advantage over men in other gardens and he felt sure this was appreciated by the present Kewites. Consider, the speaker went on to say, the staff at Kew-Sir David Prain, the Director, who is a wonderful botanist; Mr. Watson, the Curator, whose knowledge of plants and plant-growing is unequalled in Europe; in their respective spheres also Mr. W. J. Bean, amongst trees and shrubs, and Mr. W. Irving, in the rock garden, are recognised authorities. stress was laid by Sir Frederick upon the great changes taking place in the gardening profession. The days of plant collections have gone, and in their places we have houses of Carnations, Begonias, Roses, etc. The absence of stove plants at the Chelsea Show was touched upon, taking the speaker back to visions of drudgery in that department in his early days, Sir Frederick remarking that "There is no work like drudgery to make one learn." In the outdoor garden the wonderful rock gardens on view at Chelsea are evidence of a great change. The speaker then touched upon the responsibilities of members of the Guild, and the necessity for loyalty. The honour of the Guild should be deemed a sacred charge. He was pleased to know they had a Benevolent Fund to help needy members, for "no man has a right to take a step up the ladder, without holding out the hand of friendship to him below." Appreciation of the Guild did not come until its members had gone out into the world. "Be honourable! Be loyal!" said Sir Frederick. In graceful language the speaker concluded with a touching tribute to those "Old Kewites" who have laid down their lives in the service of their country.

On resuming his seat Sir Frederick was accorded a splendid round of applause. His was truly a great effort in every way, and created a profound impression on all present.

In responding to the toast of the "Kew Guild," the CHAIRMAN expressed the honour the Guild felt at the presence of Sir Frederick Moore and their other guests that evening. In welcoming the members from over the seas Mr. Hill said the Kew Guild did a good work in welding the bond of friendship among Kew men throughout the world. Quoting Aristotle in support of Sir Frederick's remarks concerning the value of practical work in the garden, Mr. Hill said, "You learn to play the harp by playing the harp."

Mr. W. Hales proposed the health of the new President, Mr. W. J. Bean, referring to the esteem in which he is held by Kew men. Mr. Bean briefly replied.

The following were present:-

A XXX TT'11 / CV
A. W. Hill (Chairman).
W. J. Bean (President).
Sir Frederick Moor
(Guest).
Major Gage (Guest).
W. C. Blaxill (Guest).
J. R. Jackson (Guest).
R. Pinches (Guest).
Allard, E. J.
Anderson, C. H.
Badderly, G.
Baker, A. F.
Bartlett, A. C.
Beswick, J. C.
Biggs, E. M.
Bintner, J.
Boff, C.
Brook, E.
Butcher, G. W.
Cannon, H. A.
Chapman, H. L. R.
Cishegg, J.
Chollett, P.
Christie, J. S.
Clark, J. W.
Clarke, N. K.
Collins, W.

Cope, Miss G.
Coutts, J.
Cowley, H.
Cundy, C.
Curtis, C. H.
Dallimore, W.
Davies, C.
Dear, G.
Dines, J. H.
Dunn, C. H.
Dunn, S. T.
Ellis, J.
Evans, W. N.
Flippance, F.
Foden, W.
Fox, W.
Galt, A. S.
Girdham, C. G.
Glover, F.
Godseff, L. G.
Goldring, W.
Grinham, F. B.
Grout, G.
Gunnell, Miss E. M.
Harcourt, F. G.
Harding, C.
Hales, W.

Hall, F. W. Hibbins, W. R. Hillier, J. M.
Horton, E. Hunter, T.
Hutchinson, J. Irving, W.
Johnson, G. C. Johnson, J. T. Jones, J. D.
Kundig, J. Lane, G. T.
Lassoe, T. V. Lodge, J.
Lynch, R. I.
Mackay, A. Marks, J. T.
Meyer, P. Miles, S. H.
Mould, G. B. Nitsch, R.
Oliver, G. H. Pettigrew, A. A.
Pettigrew, H. A. Philp, F. J.
Philpott, G. T.

Powell, Miss E. M.
Raffill, C. P.
Richardson, J.
Rolfe, R. A.
Sillitoe, F. S.
Smartt, A. E.
Southgate, H. W. L.
Spooner, H.

Stewart, W. W. Stapf, Dr. O. Sudell, R. Taylor, W. Timmers, A. Tindall, B. Tribble, F. C.

Ussher, C. B. Wallace, J. C. Ward, W. N. A. Weathers, J. White, A. H. J. Williams, R. O. Young, W. H.

COMMITTEE MEETING.

A meeting was held in the Lecture Room at Kew on November 30, at 6 P.M.

Present: Mr. A. W. Hill in the Chair, Messrs. Bartlett, Coutts, Curtis, Harvey, Hibbins, Hutchinson, and Taylor.

A letter was read from the Secretary and Editor, Mr. Herbert Cowley, stating that he had joined His Majesty's Forces, and asking to be relieved of the work of the Guild for the duration of the war.

Some discussion took place with the view of separating the two posts, but eventually it was decided to combine them until the Annual General Meeting in May. Mr. Coutts proposed and Mr. Harvey seconded the appointment of Mr. A. Osborn as Secretary and Editor for this period, and this was carried.

THE WILLIAM CRISP FUND.

A Special Fund has been opened by the Committee of the Kew Guild on behalf of Mr. W. Crisp, late packer, who is in need of assistance.

Mr. Crisp worked in the Royal Gardens, Kew, for over 34 years, and left, owing to ill health, in November 1911, when he received a gratuity from the Government of £47 12s., which is now practically exhausted owing to expenses connected with his illness. Both Mr. Crisp and his wife are about the age of 60, and are therefore ineligible to receive benefits under the Old Age Pension Act.

Mr. Crisp has since March 28th received assistance to the extent of 3s. 6d. per week from our Benevolent Fund, but as we have only a very few pounds left, it was considered advisable to open a special Fund to meet the case. It is hoped that as a result of this appeal it may be possible to make an allowance of 2s. 6d. a week to Mr. Crisp.

The Committee feel confident that Members of the Guild will readily support this Special Fund, which has been opened for the relief of an old and honoured friend, who, through no fault of his own, has fallen on evil times.

Subscriptions should be sent to the Treasurer, Mr. J. Coutts, 3, The Gables, Kew Green.

The circulation of the above appeal to members of the Kew Guild has met with very gratifying results. Up to December 31, 112 members,

resident in all parts of the world, have sent in subscriptions amounting to £74 ls. 7d. At present Mr. Crisp is being paid 3s. 6d. per week. This amount probably seems a small one to many members, but through the Treasurer, the Committee have ascertained that it is sufficient for present requirements, and though a total invalid Mr. Crisp may live for several years. At the last committee meeting £1 was voted to Mr. Crisp as a special Christmas gift. When our Treasurer took this, Mr. Crisp commissioned him, through the Journal, to express his heartfelt thanks to all the "old boys" who have so kindly remembered him in his time of need. When enclosing their contributions many writers have expressed surprise that an appeal should be necessary on behalf of such an old and valued employee.

OUR ROLL OF HONOUR.

The great European War in which we are now engaged has affected every branch of industry in the country. Few professions or callings can have responded to their country's call more nobly than that of Horticulture. From the following lists it will be gathered that Kew and Kewites, Past and Present, are nobly taking their share in the gigantic struggle. An endeavour has been made to get together as complete a list as possible, but names of some Old Kewites, even in this country, will no doubt be missing from the list. In proportion to their numbers many more of our foreign members on the Continent will be upholding the cause of their respective countries, both of the Allies and their opponents. Let us hope that by the time the next Guild Journal is being prepared for the printers the conflict will be ended and all differences of opinion settled. We shall then be better able to prepare a complete Roll of Honour.

At present, except that several of our members, including our esteemed Secretary, Mr. Herbert Cowley, are already at the Front, very little information of their doings is to hand.

OLD KEWITES.

C. F. Ball	Royal Dublin Fusiliers.
G. A. Baker	Hampshire Regiment.
J. H. Beale	Notts and Derby Regiment.
T. F. Chipp (Captain)	8th (Duke of Cambridge's Own) Middx.
	Regiment.
H. Cowley	12th County of London Regiment.
G. Douglas	Scottish Horse.
W. Dunk	Royal West Kent Regiment.
H. Eavis	Queen's Royal West Surrey Regiment.
R. Kett	Queen's Westminsters.
A. J. King	Royal Field Artillery.

H. G. King	County of London Regiment.
W. B. Little (Lieut.)	Durham Light Infantry.
R. S. Lynch	University & Public Schools Corps.
G. B. Mallett	Gloucestershire Regiment.
W. E. Marriott	South African Carabineers.
W. H. Morland	Royal Scots.
H. A. Pettigrew (Lieut.)	Welsh Horse.
J. M. Purves	Transport Officer, Nyasaland.
F. W. Rolfe	1st London Sanitary Co., R. A. M. C.
H. W. L. Southgate	Norfolk Regiment.
J. L. Veitch (Captain)	Devonshire Regiment.
J. C. Wallace	Motor Cycle Section, Signal Company,
	R. E.

PRESENT KEWITES.

Foreman.

Charles P. Raffill		Royal Fusiliers	
--------------------	--	-----------------	--

Sub-Foremen.

W. Collins	King's Royal Rifles.
J. Divers	County of London Cyclists.
F. B. Grinham	Middlesex Regiment.

Gardeners.

G cor core	0,0,
C. H. Anderson	London Scottish.
A. G. Bailey	Royal Naval Reserve.
C. Boff	Royal Fusiliers.
G. Chambers	Queen's Westminsters.
H. L. R. Chapman	Queen's Westminsters.
G. Corbett	Cameron Highlanders.
G. Grout	King's Royal Rifles.
R. R. Hayes	Sussex Regiment.
P. C. E. Jackson	Royal Fusiliers.
A. J. Little	Royal Naval Reserve.
H. J. Longhurst	Royal Field Artillery.
C. Matthews	Middlesex Regiment.
F. A. Newman	Royal Field Artillery.
G. T. Philpott	East Surrey Regiment.
L. P. Richardson	East Surrey Regiment.
E. Ruck	East Surrey Regiment.
J. Sparrow	East Surrey Regiment.
M. Vardy	Queen's Westminsters.
W. N. A. Ward	Queen's Westminsters.

Packer.

n. w. Ruck Royal Fleid Artillery	Η.	W. Ruck		Royal Field.	Artillery.
----------------------------------	----	---------	--	--------------	------------

Constables and Porters.

W. Bulpitt	East Surrey Regiment.
J. J. Cheshire	Royal Engineers.
H. Claiden	3rd Dragoon Guards.
J. Dear, Junior	East Surrey Regiment.
F. Farmer	Surrey National Reserve.
H. Fitzwater	West Surrey Regiment.
G. H. Ilbrey	Surrey National Reserve.
J. Knight	Cheshire Regiment.
E. T. Richardson	Royal Engineers.
R. H. Roffe	Royal Garrison Artillery.
T. Sage	Royal Army Medical Corps.
J. Stone	East Surrey Regiment.
J. Sutcliffe	East Surrey Regiment.
W. H. Trigg	16th Lancers.
G. Williams	3rd Hussars.
W. Wood	Surrey National Reserve.

Gangers, Labourers, and Boys

Gangers, Laboure	ers, and Doys.
B. Allaway	East Surrey Regiment.
H. Arnold	Scots Guards.
E. E. Bundy	Royal Field Artillery.
J. Claiden	3rd Dragoon Guards.
H. S. Cockroft	Royal Fusiliers.
J. Fancy	Lincolnshire Regiment.
T. Finney	Royal Navy.
H. J. Foster	Army Ordnance Corps.
A. Gadd	Wiltshire Regiment.
Albert Garnett	Royal West Kent Regiment
J. Garnett	Wiltshire Regiment.
C. Golding	Royal Field Artillery.
A. E. Goode	East Surrey Regiment.
F. Honey	East Surrey Regiment.
H. E. Holloway	Royal Navy.
H. J. Hunt (Mudge)	Lincolnshire Regiment.
G. Lewis	East Surrey Regiment.
T. H. Marshall	East Surrey Regiment.
P. Martin	East Surrey Regiment.
W. G. Powney	Veterinary Corps.
F. T. Purssell	Royal Field Artillery.
C. Riddick	East Surrey Regiment.

H. W. Sharp

Life Guards.

A. C. Smith	Suffolk Regiment.
H. J. Smith	East Surrey Regiment.
J. Smith	Royal Fusiliers.
F. Windebank	East Surrey Regiment.

A number of the Constables and Porters who have rejoined the colours are Non-Commissioned Officers acting as Instructors in the New Army.

To the list might also be added the names of the following exsoldiers who were employed temporarily as labourers when the war broke out:—C. Browning, T. Burley, T. Clay (killed in action), W. Howard (in hospital, severely wounded), W. Hurst, T. Pizzey, and C. Wade.

THE MUTUAL IMPROVEMENT SOCIETY.

Session 1913-14.

CONTINUED success attends this most useful Society. The average attendance at the meetings was higher than for the last nine years, being 39·16 compared with 35·6 of last year.

The accompanying Syllabus shows the wide variety of subjects brought before the members for discussion. The largest meeting was on October 6, when 68 members were present, the subject for the evening being most ably dealt with by the Assistant Director. There were 25 meetings held, 9 lectures being illustrated with lantern slides.

The duties of Chairman were ably carried out by Mr. J. Coutts for the third year in succession. Ample evidence of the interest he takes in the Society is shown by his attendance at the whole of the meetings held during the Session.

The Hooker Prize, now given by the Director, was awarded to R. S. Lynch.

Syllabus 1913-14.

1913.		
Oct. 6.	Botanic Gardens, their History and	
	Function (Lantern)	A. W. Hill, F.L.S.
,, 13.	Winter-flowering Begonias	R. O. Williams.
,, 20.	Roses	J. Coutts.
,, 27.	Chrysanthemums	T. Cooper.
Nov. 3.	How Orchids Grow	R. A. Rolfe, A.L.S.
,, 10.	Exhibiting Hardy Herbaceous Plants	W. N. A. Ward.
,, 17.	Trees and Shrubs in Hampshire	F. B. Grinham.
,, 24.	Orchid Culture	H. W. L. Southgate.
"		0

Dec. 1.	Swiss Forestry (Lantern)	W. Dallimore.
,, 8.	Sweet Peas	W. N. Evans.
,, 15.	The Forcing of Vegetables	H. Ryall.
,, 22.	Rhododendrons (Lantern)	C. P. Raffill.
1914.		
Jan. 5.	Plant Diseases (Lantern)	G. Massee, F.L.S
,, 12.	Injurious Insects	G. B. Mould.
,, 19.	Hard-wooded Greenhouse Plants	W. Taylor.
,, 26.	Trees and Shrubs in South Ireland	
	(Lantern)	J. C. Beswick.
Feb. 2.	The Cultivation of Alpines	A. Holden.
,, 9.	British Botany	E. Yuill.
,, 16.	The Fertilisation of Some Peculiar	
	Flowers	N. E. Brown, A.L.S.
,, 23.	British Trees (Lantern)	A. F. Baker.
Mar. 2.	A Trip to the Canaries (Lantern)	T. A. Sprague, B.Sc.,
,, 9.	Famous Scottish Gardens	G. Farries. [F.L.S.
,, 16.	Tree Carnations (Lantern)	H. L. R. Chapman.
,, 23.	The Pruning of Fruit Trees	J. W. Clark.
,, 30.	Notes of a Novice on the Continent	
	(Lantern)	R. S. Lynch.

Chairman, J. Coutts.
Vice-Chairman, W. Collins.
Hon. Secretary, R. S. Lynch.
Assist. Secretary, J. C. Beswick.

THE LECTURES, 1914.

Geographical Botany. Lecturer, Mr. N. E. Brown, A.L.S.

26 certificates. Highest number of marks: W. Clark, F. B. Grinham, W. R. Hibbins, and G. T. Philpott, 100. Maximum 100.

Physics and Chemistry. Lecturer, Dr. P. Haas.

32 certificates. Highest number of marks: F. Glover, 95; F. Flippance, 94; and C. Hazel, 92. Maximum 100.

Economic Botany. Lecturer, Mr. J. M. Hillier.

24 certificates. Highest number of marks: A. R. Bell and J. C. Beswick, 250; A. F. Baker and R. O. Williams, 249. Maximum 250.

British Botany Club.

1913 (Secretary, G. C. Johnson):—20 certificates were granted for collections.

In response to representations made to the Board of Agriculture and Fisheries, the following revised Course of Lectures has recently come into operation:—

FIRST YEAR MEN.

Physics and Chemistry	25 Lectures.
General Botany	25 Lectures.
Geographical and Systematic Botany	20 Lectures.
Demonstrations among Living Collections	20 Meetings.

SECOND YEAR MEN.

SECOND YEAR MEN.	
Plant Pathology	25 Lectures.
Soils and Manures	10 Lectures.
Economic Botany	25 Demonstrations.

For some years now there has only been one Botanising morning each week. This has now been extended to two mornings, and includes the "Demonstrations" which are to be given in the summer.

APPOINTMENTS AND RETIREMENTS.

After forty-one years' continuous service, Mr. N. E. Brown retired from the post of First Class Assistant in the Herbarium on July 10, having reached the age limit. To most Old Kewites Mr. Brown will be best remembered as Lecturer on Geographical Botany, a post he has occupied since 1874. A portrait of Mr. Brown appeared as the frontispiece of this Journal for 1904, with an appreciation of his work.

The vacancies in the Herbarium Staff, created by the retirement of Mr. N. E. Brown and the death of Miss Jessie J. Clark, have been filled, as the result of a competitive examination, by Mr. M. B. Scott, M.A., B.Sc., of Edinburgh, and Mr. W. B. Turrill, previously a Temporary Technical Assistant.

Mr. T. F. Chipp, B.Sc., Assistant Conservator of Forests, Gold Coast, has been appointed Assistant Director of Gardens in the Straits Settlements. While home on leave, previous to taking up this new appointment, Mr. Chipp, who is an officer in the Territorials, went into camp with his regiment, the Duke of Cambridge's Own (Middlesex). When he was under canvas the war broke out, and Captain Chipp is now with his regiment at Gibraltar.

Sub-Inspectors under the Board of Agriculture and Fisheries.—
The passing of the Destructive Insects and Pests Acts has necessitated
the appointment of a number of Sub-Inspectors attached to the Horticultural Branch of the Board of Agriculture and Fisheries. It is with

great pleasure we record the appointment, on the recommendation of Kew, of the following Members to these posts:—F. G. Cousins, W. N. A. Evans, L. W. Gardner, F. Glover, J. Jarrett, G. C. Johnson, D. G. McIver, C. H. Oldham, G. H. Oliver, and F. G. Tutcher. For the purposes of the Act the country is divided into districts, each with its Sub-Inspector. Their duties are to investigate and report upon any diseases or pests which may occur. At present the American Gooseberry Mildew and the Wart Disease and Corky Scab of the Potato claim most attention.

During the absence of Mr. C. P. Raffill with Kitchener's Army, Mr. W. Taylor is in charge of the Tropical Department. Mr. W. L. Lavender resigned his position as Head Gardener to the Princess of Monaco in France during July, and is temporarily in charge of the Temperate House. Another Old Kewite, Mr. J. Clark, who was disengaged, has returned to the Seed Room, the scene of his labours some years ago, while the Seed Collector is away at the war.

Mr. R. Derry has retired from the position of Curator of the Botanic Gardens, Singapore, and is now living at Kew, almost within the shadow of the Pagoda.

The many friends of Mr. R. A. Rolfe, A.L.S., will hear with pleasure of his recent promotion to be a First Class Assistant in the Herbarium. Mr. Rolfe's work among Orchids is of world-wide repute, and is particularly valuable, because living plants as well as Herbarium specimens receive his close attention.

The following changes and appointments have also to be recorded:-

Home.

J. Adamson, H. G., Pen Moel, Chepstow.

J. H. Beale, Midland Agricultural College, Derby.

T. Cooper, School Garden, Birmingham Parks Dept.

G. W. Gray, H. G., Batcombe Court, Wrington, Somerset.

A. J. Hartless, H. G., Hemsted, Benenden, Cranbrook, Kent.

W. W. Pettigrew, Supt. of Parks etc., Manchester.

B. H. Salvage, H. G., Chantmarb Manor, Dorchester.

T. A. Summerfield, H. G., Alderley Park, Chelford.

F. G. Tribble, H. G., Moreton Hall, Dorset.

C. S. Walsh, F., W. Thomson & Sons, Clovenfords.

J. W. Watkins, Horticultural Lecturer, Cornwall County Council.

A. Wright, Botanic Garden, Birmingham.

Indian and Colonial.

A. R. Bell, Curator, Agricultural Dept., Southern Provinces, Nigeria.

F. Birkinshaw, Instructor, Dept. of Agriculture, Mauritius.

J. W. Campbell, Visiting Agent, Rubber Estates, Malacca.

A. B. Culham, Senior Curator, Agricultural Dept., Gold Coast.

- J. T. Johnson, Manager, Fruit Farm, Naini Tal, India.
- A. W. Maynard, National Botanic Gardens, Cape Town, South Africa.
- J. C. Moore, Agricultural Superintendent, Grenada.
- R. Service, Hort. Supt., Dept. of Science and Agriculture, British Guiana.
- C. Warren, Curator, Agricultural Dept., Southern Provinces, Nigeria.

Foreign.

- J. Brown, H. G., East Avenue, Pawtucket, Rhode Island.
- H. E. Downer, H. G., Botanic Garden, Smith College, Northampton, Mass., U.S.A.
- M. Free, H. G., Brooklyn Botanic Garden, New York.
- A. R. Gould, San Francisco Exhibition. .

WEDDING BELLS.

	WEDDING DE	LILO.	
Mr. C. F. Ball	to Miss Alice Lane	at Dublin.	Dec. 16, 1914.
Mr. T. G. Bullock	" Miss Greatoux	" London.	Sept. 25, 1913.
Mr. K. G. Burbridge	, Miss Margaret McIvor	,, Hanover Sq.	Feb. 2, 1914.
	Ross		
Mr. G. W. Butcher	" Miss Annie Hudson	" Hartfield.	June 10, 1914.
Mr. S. R. Candler	" Miss Ellen Martin	"Yonkers,	June 13, 1914.
		New York.	
Mr. E. S. Dodd	" Miss L. Durrance		Nov. 1913.
Mr. G. W. Gray	" Miss Beatrice M. Wat	- ,, Kew Gardens	s. Dec. 26, 1914.
Mr. F. R. Long	" Miss E. Lonsdale	"Gopeng, Pera	k.Oct. 1913.
Mr. H. J. Moore	" Miss Gertrude Barlow		
Mr. H. P. Norman	" Miss Elsie Alice Care	y ,, Weston-sup. Mare.	- July 4, 1914.
Mr. C. Warren	" Miss Effie Patricia Rodulfs	" Trinidad.	Feb. 7, 1914.

METEOROLOGICAL NOTES.

	Rainfall in inches.	Tempe	erature.	
		Maximum.	Minimum	
1914.			ALCOHOL:	
January	.50	55° F.	18° F.	
February	2.33	58	26	
March	3.88	65	26	
April	.78	74	31	
May	1.92	79	34	
June	1.83	85	39	
July	1.61	89	46	
August	1.36	81	45	
September	.98	79	32	
October	1.19	68	31	
November	2.91	60	26	
December	6.12	54	26	
Total rainfall for 1914	25.41		17.00	

KEW NOTES.

According to the official figures the attendance of the public in 1914 was 4,082,011, an increase of nearly 300,000 over last year's total. Weather is the great factor as regards attendance, and although there were many fewer visitors in August than in the corresponding month of 1913 (and in ordinary times the German element is very noticeable), it does not appear that, so far, the war has had much effect in keeping people away from Kew.

Four members of the Kew staff were abroad when war was declared in August, and experienced some difficulty in getting back to England. Dr. Stapf was attending a botanical congress at Munich, Mr. and Mrs. Boodle were in Silesia, Mr. Cotton was in Switzerland, and Mr. Turrill plant collecting in Iceland. All are now safely back at their respective posts.

Hearing of the decay of the Flagstaff at Kew, the Government of British Columbia offered to present a new pole. We understand one has been selected, growing on Vancouver Island, 225 feet in height. As enquiries have recently been made regarding the best means of getting the pole from London to Kew, we assume that, despite the war, its transport is being proceeded with.

The new Tea Pavilion was opened on October 1st. It may be a satisfactory structure from the caterers' point of view, but as an ornament to the Gardens the appearance of the building leaves much to be desired.

THUNDERSTORMS and gales of wind have been more than usually prevalent at Kew during the past year. On Monday, March 16, the best specimen of the Tulip Tree in the Gardens, which stood at the north end of the Rhododendron Dell, was uprooted by a gale just before noon. This fine old tree was 80 feet in height, and is thought to have been planted by Capability Brown early in the reign of Lightning on May 22 struck one of the tall Atlas George III. Cedars in the Cedar Avenue. Its bark was torn off in a curious cork-screw fashion, some of the pieces being hurled 35 yards away. During the same storm a tall specimen of the Spanish Chestnut standing near the Pumping Station was struck, and three pavingstones in the path surrounding the Japanese Gate were lifted out of position—one of them turned completely over. In June a second Atlas Cedar, standing in the Rose Garden, was struck. On the evening of December 28, as our pages were being prepared for the printers, a very violent storm of wind and rain visited the London district. A number of trees in the Gardens were uprooted, including two Pines, a Cedar, Oak, Common Oak, Beech, and Elm, while in the morning the lawns and woods were strewn with branches and twigs. The greatest loss is the tall specimen of the Common Ash in the middle of the Rhododendron Dell.

The sympathy of all members of the Guild will be extended to the Director and Lady Prain in the loss of their son. Lieutenant T. Prain was killed in action in France on October 21.

Our Secretary, Rifleman H. Cowley, writes from "Somewhere in France," December 27, 1914:—"We crossed on Christmas Eve, and have fed ever since on bully beef and biscuit—it is so much better than the usual Christmas fare. Here we are under canvas and knee deep in mud, but as happy as mud-larks."

Official Guide for Visitors.—The arrangements made to conduct parties of visitors round the Gardens, Plant Houses, and Museums are at present in abeyance. Since the inauguration of the tours in April 1913, the number of visitors who have taken advantage of the privileges provided cannot be considered satisfactory. During August and September, presumably owing to the war, the number of visitors attending declined, and on October 1st the tours were discontinued. The following unsolicited testimonial was sent by a grateful visitor to the Editor of The Spectator:—

The most delightful thing to do In summer is to visit Kew. No garden can with it compare. Have you an afternoon to spare? At 3 o'clock you should be there.

For threepence only they provide In Mr. Dunn a perfect guide. If you know much, he'll tell you more; If you're a dunce, he'll ope the door Of botany and woodland lore.

A dozen visits are too few To taste the full delights of Kew, For underneath the summer sun No guide deserves the mark A 1 More thoroughly than Mr. Dunn.

WE were able to report in the last Journal the purchase of Gumley Cottage and Chestnut Cottage, the backs of which abut on the Stores and Tool Shed in the Office Yard (Melon Yard). Built early in the reign of George III. they originally formed one house, an order of things which has again been reverted to. In the hands of the Works Department the building has recently been thoroughly renovated, and an entrance made from the gardens by the side of the Stores. It is intended shortly to open the building as a Pathological Laboratory.

OLD KEWITES AT HOME.—The following members of the Guild have been home on leave, or owing to changes in their respective appoint-The list is extensive, but may not be quite complete:—J. Anderson (Accra), J. W. Anderson (Singapore), R. Band (Gold Coast), F. Birkinshaw (St. Vincent), T. W. Brown (Cairo), F. H. Butcher (India), K. G. Burbridge (Sierra Leone), H. A. Cannon (Gold Coast), T. Cartwright (Soudan), T. F. Chipp (Gold Coast), A. B. Culham (S. Nigeria), E. W. Davy (Nyasaland), M. T. Dawe (Brazil), E. S. Dodd (New Zealand), G. H. Eady (Aburi), W. C. Fishlock (Virgin Islands), R. Fyffe (Uganda), Edna M. Gunnell (Germany), T. Hunter (Gold Coast), J. T. Johnson (Calcutta), W. H. Johnson (S. Nigeria), G. T. Lane (Calcutta), W. L. Lavender (France), R. Mearns (Canada), A. C. Miles (Gold Coast), E. W. Morse (Gold Coast), W. J. Newberry (Natal), H. Powell (Nairobi), G. H. Ridley (Cape Town), W. N. Sands (St. Vincent), F. S. Sillitoe (Khartoum), C. B. Ussher (Java), C. Warren (Trinidad), A. H. J. White (United States).

WHILE away on leave, Mr. A. C. Miles, who is now a Senior Curator of the Agricultural Department, Gold Coast, has been on an official trip to the West Indies. The tour lasted two months, Mr. Miles returning to the "old country" a few days before Christmas.

SMITHII.

When I am walking down at Kew,
I thank the kind and learned powers,
Who put the names for me to view,
Of trees and flowers.

I read beneath the Willow tree,
How exiles wept in Babylon,
And in the April Peach I see
The Persian sun.

But somewhere on a tree I found
The Latin title and therewith
A name that had a homely sound,
The name of Smith.

Since then when I those glades have trod,
I honour men I never knew,
The fellow labourers with God
Who gave me Kew.
EDWARD SHILLITO.

From The Garden.

On New Year's Day a tea and entertainment was given in the Gymnasium by the members of the Staff to the wives, children, and mothers of the men employed in the Gardens who are absent from home serving in His Majesty's Forces. The arrangements were made by the Assistant Director assisted by the wives of the officials, and the lady members of the Staff. Following tea at 4.30 p.m. the room was cleared for a conjuring entertainment. Having kept his audience highly amused for an hour the conjurer supplied the elder children with presents, and then made way for Father Christmas, who arrived carrying a huge sack and drawing a heavily-laden sleigh with presents for all the guests. During an interval two patriotic songs were rendered by Messrs. J. Masters Hillier and F. G. Harcourt. Rather more than 120 invitations were issued; 85 children, and 38 wives and mothers were present.

On Tuesday, January 13, 1914, Mr. John Gilbert Baker, F.R.S., V.M.H., reached his eightieth birthday. The occasion was thought to be a very appropriate time for the presentation of an illuminated address from his old colleagues still at Kew, and those who, like Mr. Baker, have retired from the scene of their former labours. The terms of the address were as follows:—

"To-day you complete the eightieth year of a long and useful life, the best part of which has been intimately connected with Kew. Enthusiasm, love, and a keen sense of duty in your work and unfailing courtesy and affection to your colleagues have been yours. You have been an example to us in our common service, and a friend whose personal charm has won our hearts. Active and vigorous through all these years, you now rest from toil with interest still unabated in the progress of our science, and with that serenity of outlook which has marked your life. May you enjoy many more years of health and happiness."

Mr. Baker's portrait, with particulars of his long career in the interests of botany and horticulture, were published in the Guild Journal for 1897. On a fine afternoon Mr. Baker is still able, with the aid of a stick, and in the company of his daughter, to enjoy a walk in the Gardens.

During the year a very valuable addition has been made to the Orchid collection. By his will the late Sir Trevor Lawrence, Bart., K.C.V.O., bequeathed the famous collection he had formed at Burford Lodge, Dorking, to his wife, with the desire that she would present to the Royal Botanic Gardens, Kew, species of botanical interest which would form useful additions to the Kew Collection. Lady Lawrence, in consultation with the Director, has caused to be forwarded to Kew 580 plants belonging to upwards of 80 genera.

Many species were not previously represented, while others are very rarely seen in cultivation.

Copy of the Kew Certificate of fifty years ago, in the handwriting of the Sub-Curator, Mr. McLeod:—

In short, his services and character entirely merit our approval, and he now leaves this service at his own request.

J. SMITH,
Curator.
W. J. Hooker,
Director.

Royal Botanic Garden, Kew. 26th March, 1864.

The March number of the Agricultural Economist and Horticultural Review contains a portrait and an appreciation of Mr. William Hales, A.L.S., from which we quote the following:—"The Physic Garden at Chelsea gave Kew her first head gardener, Aiton, and now in these later times Kew has repaid the long outstanding account by giving one of her brightest sons to be Curator at Chelsea." "If Mr. Hales had not combined in himself the skill of the practical gardener, the keen ardour of a student, and the optimism of young manhood, his task of rejuvenating an old garden would have been foredoomed to failure."

THE CRICKET CLUB.—Season 1914. Out of a total of 23 matches arranged, 8 were won, 1 drawn, 9 lost, and 5 abandoned at the end of the season owing to the war. On paper, perhaps, the results do not appear quite so satisfactory as last year, but from a playing point of view the season was a great success, until the beginning of August. One of the most enjoyable games was that against the Assistant Director's Cambridge Eleven, which this year we were successful in winning, scores:—179 for 8 wkts. (Harcourt, 63) v. Assistant Director's XI., 114 runs. The century was also passed in the "local Derby" with the Kew Albion Club on Kew Green, scores: 134 for 9 wkts. (Bennett, 56) v. Kew Albion, 77 runs.

We have seldom been stronger in the bowling department with six excellent bowlers, F. Bennett being top of the averages with 45 wickets, taken at an average of 4.4 runs.

The batting generally during the season has been above the average,

with numerous double figure scores, rather than one or two men making all the runs. F. G. Harcourt heads the list with approximately an average of 18 for 14 innings and a total of 249 runs for the season.

The following list of opponents shows a distinct "gardening flavour," evidence that the pleasure of cricket is combined with a desire to gain knowledge: Carter's, Balls Park, Friar Park, Park Place, Sander's, Sutton's.

From a financial standpoint the Club is in a thriving condition, thanks to the continued support of the Mid-Surrey Golf Club. The receipts, plus £2 5s. $9\frac{1}{2}d$. in hand, amounted to £13 10s. $9\frac{1}{2}d$. The expenditure was £11 10s. 3d., leaving a balance of £2 0s. $6\frac{1}{2}d$.

The Officers were:—Captain, H. L. R. Chapman; Vice-Captain, F. G. Harcourt; Hon. Secretary, F. Glover.

The Swimming Club.—Season 1914. The past year has been a most successful one, 52 persons having joined, with the following Officers:—President, Mr. A. W. Hill; Captain, J. C. Beswick; Vice-Captain, G. Grout; Hon. Secretary and Treasurer, W. N. A. Ward.

Evening practices with professional instruction have been held weekly during the season at the Richmond Swimming Baths. All members unable to swim have been taught the breast stroke, while regular swimming members have accomplished the over-arm and back strokes, the surface dive, and plunge.

Having become affiliated with the Royal Life Saving Society, classes in Life Saving were commenced in August. Only five classes had been held when the war necessitated their premature abandonment for the season.

The Annual Championship Race in the River Thames, from Isleworth Gate to Kew Bridge, a distance of about $1\frac{1}{2}$ miles, was held on July 28th. Eleven competitors faced the starter, and all but one, L. P. Richardson, who was seized with cramp, completed the course, in the following order:—W. N. A. Ward, 18 mins.; H. W. Ruck, $18\frac{1}{2}$ mins.; J. C. Beswick, 19 mins. 40 secs.; G. Grout, 19 mins. 50 secs.; J. W. Sparrow, 20 mins. 9 secs.; J. A. Mingay, 20 mins. 55 secs.; A. G. Bailey, 20 mins. 57 secs.; A. Beer, $21\frac{1}{2}$ mins.; R. Sudell, $22\frac{1}{4}$ mins.; and F. B. Grinham, $22\frac{1}{2}$ mins. It is interesting and rather remarkable that the first three competitors to reach the winning post were the same as in the previous year, and in the same order. The winner's time was $2\frac{1}{2}$ mins. faster, though this may be partly due to a stronger tide. The President, Mr. Hill, acted as Judge, and Mr. Sealy as Starter and Timekeeper. The winner holds for a year the Silver Cup presented by the President.

The Financial Report is as follows:—Balance from previous year, £1 15s. 10d.; receipts, £7 4s. 11d.; expenses, £7 5s. 1d., leaving a balance in hand of £1 15s. 8d.

The Seventeenth Annual Social was held on Jan. 16th at the Boat House, Kew. Including lady friends and a goodly number of "Old Kewites," those present totalled about 150. Mr. Ellis ably performed the duties of M.C. Between the dances songs were rendered in the ball room by members and lady friends, Mr. Nitsch gave a violin solo, and Mr. Braggins, in kilt, contributed the Highland Fling and Sword Dance. For non-dancers cards, draughts, dominoes, etc. were provided in an adjoining room. The proceedings closed at 3 A.M. with the singing of Auld Lang Syne and the National Anthem. At a recent meeting of those interested it was decided, owing to the war, to defer the holding of the 1915 Social for the present. Everything will depend on the duration of the war. It has been suggested that following the conclusion of peace the Social should be held to include also a "Welcome Back" to those Kewites who have joined the Colours.

The Football Club.—Season 1913-14. As reported in the last issue of the Journal a fortnightly programme of matches was played, as trouble had been experienced in the past in getting together a full team every week. Only 3 matches out of 11 played were won, but as we suffered defeat by the odd goal in 5 of the matches lost, the games were very well contested, though on paper the results appear only moderate. The best victories were against St. Stephen's Old Boys, 6 goals for to 1 against, and Crypto Motors, 5 goals for to 0 against us.

Financially the season was very successful. The receipts, plus £2 3s. 6d., the profit from the Football Social Evening, amounted to £8 18s. 3d. The expenditure was £5 18s. $6\frac{1}{2}d$., leaving a balance in hand of £2 19s. $8\frac{1}{2}d$.

The following were the Officers for the Season:—Captain, J. Ellis; Vice-Captain, H. L. R. Chapman; Hon. Secretary and Treasurer, F. G. Harcourt.

Season 1914-15. As so many sub-Foremen and Gardeners are serving with the Colours, it was unanimously decided at a General Meeting to discontinue playing Football for the duration of the war.

KEW AND KEW MEN FIFTY YEARS AGO AND ITS INFLUENCE ON THEIR FUTURE.

I had six years' experience before entering Kew Gardens, the last two years of which were spent in the Royal Gardens, Windsor, under Mr. Ingram, chiefly in the Fruit and Forcing Departments. I went to Kew in March 1862. I remember quite well my first interview

with the Curator, Mr. John Smith, on my arrival. He questioned me on the botanical names of a good many plants, and told me what was expected of me, etc. I started work next morning among the greenhouse plants in No. 10. After a few months I was moved to the stove plants, and the last year I was promoted to be first man in the propagating houses under Mr. Gower. I thoroughly enjoyed, and made good use of the half-hour allowed after breakfast every morning to study the plants and their names in the other departments of the Gardens. It is so useful and convenient, and a great feature at Kew, to find everything in every department distinctly and correctly named.

The leading men at Kew in my time were:—Sir William Jackson Hooker, Director; Dr. (afterwards Sir) Joseph Dalton Hooker, Assistant Director; Mr. J. Smith, Curator; Mr. D. McLeod, Assistant Curator; Mr. A. A. Black, Keeper of the Herbarium; Mr. J. R. Jackson, Keeper of the Museums; and Professor Oliver, Lecturer, etc.

Among the young men at Kew in my time there was one whose career I have watched with the greatest interest and pleasure. I refer to Dr. W. B. Hemsley. Our many botanical rambles in the old Kew days have never been forgotten. His promotion to the position of Keeper of the Herbarium and his many other honours have been merited; his talents as a botanist and author are beyond all praise. His handbook of "Hardy Trees, Shrubs and Herbaceous Plants" I should like to recommend to every gardener. My copy, with constant use by myself and those around me, is nearly worn out.

I may say that during my two years at Kew I took advantage of every opportunity to improve myself, and the benefits I derived have been a great pleasure and help to me through a long and active life. I have been asked to give my opinion on the advisability of a young gardener spending a period at Kew. My opinion is, and always has been, that for a young man who is anxious and determined to lay a good foundation for his future career, a period, say two years at least, is of the greatest utility. He must go with the firm resolve to make the best use of his time and of the many opportunities to be found there. If he is not inclined to do this he had better stay away. Some gardeners I know are not quite of my opinion in respect to young men: they think they learn things that are not of much use to them. I can safely say, that one can obtain at Kew much broader and more general views of plant knowledge. Many errors are corrected and much valuable information can be obtained as to the nomenclature and distribution of plants. I have now retired, just 50 years after leaving, and I feel and have always been deeply indebted to Kew for the great help and intelligence I obtained. It has made my work easier and my life happier. I have been better able to impart knowledge to the many young men I have had under me as well as to those in riper years.

I want to spend an enjoyable day, nothing is more pleasant to me at any time of the year than a visit to Kew.

British Botany has always been a very interesting study and a great pleasure to me. I have had the honour of conducting many botanical rambles in this neighbourhood, including some from the Kew British Botany Club. They are always very much enjoyed. I have also exhibited many named collections of wild flowers at our local shows. These are always much appreciated and are among the most interesting features displayed.

My career since leaving Kew is as follows:—I went first to Berry Hill, near Maidenhead, then the seat of the late John Noble, Esq., who was a great lover of his garden. The place was much improved by the late Mr. Marnock, the best landscape gardener of his day and one of the best and kindest men I ever knew. Gardening at Berry Hill was thoroughly well done. My first two years I acted as foreman in the flower garden; the next two years as foreman in the glasshouses. left Berry Hill to be head gardener to Lord Southampton at Whittlebury in Northamptonshire. After three years my previous employer, J. Noble, Esq., purchased Park Place and invited me to come back and undertake the management of it. This is one of the most beautiful estates on the Thames. Mr. Marnock was again called in, many alterations and improvements were made by him, and I had the pleasure of carrying them out. After twenty years at Park Place my kind and generous employer died, at a good old age. Mrs. Noble carried the place on in the usual way until her death a year ago. It now belongs to her eldest son, Wilson Noble, Esq.

For the last 21 years a most enjoyable Past and Present Gathering has been held annually at Park Place. Many who had served here are delighted to come back to meet old friends and to look round the old place; generally about 120 are present. The members of the family take much interest in this gathering. A good lunch, cricket, and tea are provided, besides an entertainment at the Clubroom in the evening, at which as many as can are delighted to stay. A reading-room and library are provided at Park Place for the use of the gardeners.

The following are some of the successes and honours that have been awarded to me. During my two years at Kew at the examinations held in the Gardens, I was awarded at the end of the first year 1st Prize (equal) with Ferguson in Botany; at the end of the second year I came out a clear 1st. The prizes of books were chiefly the result of Professor Oliver's lectures on Botany.

Since leaving Kew I have been awarded:-

1865:

1st Class Teacher's Certificate in Systematic Botany, 1st Class Teacher's Certificate in Vegetable Physiology, By the Science and Art Department, South Kensington.

1866:

1st Class Certificate in Botany and 1st Prize,

1st Class Certificate in Floriculture and 1st Prize,

1st Class Certificate in Fruit and Vegetable Culture and 2nd Prize, By the Society of Arts.

1867:

At the two days' examination held by the Royal Horticultural Society at South Kensington, I was awarded the Medal for gaining the highest number of marks in Practical Gardening, and a Diploma making me an Associate Member for life.

Selected by the Society of Arts to report on Horticulture at the Paris Exhibition in 1867 and again in 1878.

1901:

Elected an Honorary Member of the French National School of Horticulture at Versailles.

Nominated by the French Government Chevalier du Mérite Agricole.

The French honours were given me chiefly for acts of kindness to young French gardeners who came one after another for many years to Park Place Gardens for improvement in Horticulture, etc. Some of them are now among the leading Horticulturists in France.

In my retirement, after 43 years at Park Place, I feel it a great pleasure to look back on my gardening career and to hear of the welfare of the many men who passed through my hands, many of whom are holding good positions in different parts of the country and abroad. I hope to enjoy a few years of rest and quiet. I am still to live in my nice old home on the Park Place estate, with its old fashioned garden. The wild flowers will not be forgotten, although I may not be able to take such long rambles as in the old days.

I am devoting a portion of my nice old garden to the cultivation of everlasting flowers, ornamental grasses, winter cherries and many other plants of this character. I cut them when they are ready, dry them carefully, and give them away late in autumn to friends, hospitals, etc. I need hardly say they are very much appreciated, and provide a pleasant occupation for any leisure I may have.

The receipt of the *Journal* of the Kew Guild is always a great pleasure to me. Many old, well-known names turn up, and the list of Old Kewites is often consulted. It is interesting to know where the men are and what they are doing.

George Stanton.

December 28 1914.

THE BOMBARDMENT OF YPRES (YPER).

It was on the 7th of October that the Germans entered Ypres. In the early morning we saw in front of our house for the first time an Uhlan on horseback. He went up and down, inspecting the fields, the roads, the ditches, the trees and everything that could hide an enemy. Now and then we heard some rifle shots, and when they came nearer and nearer there was of course a little excitement among the citizens. At noon we were told that three Germans were killed and that their horses had been taken by the Belgian volunteers. The Civil Guards with a few gendarmes conducting patrols of Belgian volunteers were very busy hunting and chasing the Uhlans, and we all were so happy to see from time to time some German prisoners.

At one o'clock it was rumoured that a whole German army corps (40,000 men) was approaching the town by the Menin Road. Riflefiring became more powerful and was increasing rapidly. At two o'clock the Belgians had to retire because they were outnumbered by the Germans, who fired several big shells into Ypres. At half-past two our defenders fired their last cartridges and went away in a special train in the direction of Furnes, joining the Belgian army in retreat from Antwerp.

At three o'clock the Germans took Ypres. They went direct to the railway station and began to destroy telephone and telegraph wires. broke with the butt ends of their rifles the machinery, took the money out of the offices. They were disappointed at finding the railway station without engines and waggons (all Belgian engines and carriages had been sent off to France). They stabled their horses in the first class waiting rooms; the second and third class were not good enough for them. They also hammered the whole night on the safe, but could not open it. Meanwhile the German Headquarters billeted themselves in the town, and everyone had to take in as many soldiers as possible. They also stabled their horses in the public buildings and in our beautiful Town Hall. They made a war levy on Ypres of 60,000 francs, which the Burgomaster had to pay at once. During the night we heard them singing and many soldiers got drunk. At ten o'clock they looted a jeweller's shop because the proprietor, an old widow lady, was afraid to open the door at such a late hour. The drunken Germans smashed the door and entered the shop; in less than ten minutes the whole shop was empty, and the lady, frightened to death, had locked herself in the cellar until next morning. A poor baker who had to cross the market place was ordered to come down off his cart, and they took all the bread, took out the horse, and with the butt ends of their rifles and hammers they broke the cart in order to get wood to light a fire for preparing their meals.

Fortunately the Germans did not stay much longer, and they went

off for Calais in the morning. On their way they requisitioned every horse, the best cars, straw, hay, oats, blankets, coffee, soap, and from one mansion they took 4000 bottles of wine. They neither neglected all the linen, even ladies' underwear, and they gave in return a signed paper to be paid, they said, by the King of the Belgians! We all know the worth of such a scrap of paper given by a German!

The Ypres citizens were very much delighted seeing the last Germans passing through the town, and everybody had to give his opinion, his appreciation, and his complaints. Everyone had to complain, especially our shopkeepers. See how the German soldiery were behaving; when they entered the shop they were very polite, and they entered in lots of 10 or 15 or 20; the first man paid for all he required, but those following were filling their pockets with all kinds of articles, so that one or two men were paying while the others were stealing and robbing, and when they left there was very little money in the till. This we call German culture! I cannot deal with what happened to the women and girls; let me only say that the following day we found many girls and women laid up in the hospital.

The Germans, on their way to Calais, happened to meet some English forces at Cassel, and there was a big fight. Since then the Germans have lost the way to Calais and are still fighting for Ypres. They could not reach Ypres again, and are surrounding the town on three sides—north, east, and south.

On the 11th October I was very delighted to see the first English soldiers on three motor cars carrying machine guns. It was, of course, a great pleasure to me to give them as much information as I could, and off they went in company with two Belgian drivers. One hour after I was still more pleased when I saw them return with seven German prisoners. They told me they had killed the seven horses, and they went away triumphantly, crossing the market place under the applause of the Ypres people.

The 15th of October was a memorable day for all of us. We saw the first English regiment in full strength coming from Ostend. It was the York Regiment, and the whole regiment halted in front of my house. A billeting sergeant came forward and enquired for shelter for his regiment. He addressed me in French, and I answered in French that I was able to quarter the whole regiment in one of my big vineries. The sergeant went off with a smile and he reported to his officer my offer. The officer smiled, and I heard him say "I cannot believe it; that man is joking." I approached, and in my very best English I invited both officer and sergeant to enter and to see the vinery in question. Hearing me speak English they were very pleased, and the officer told me I was the first Belgian he had met who spoke the English language so correctly. When I opened the doors of my vinery his smile disappeared, and he said, "Well, I have never seen such a big vinery in my life, and I am very pleased to take it for my men."

This vinery has exactly 4500 metres—more than a square acre. So we got straw and hay ready, and the men had a clean shave and a good wash. Everyone was happy, especially my boys, who were very busy helping the soldiers: they were full-handed doing shopping for them, and mother had to make coffee the whole afternoon. My boys asked their mother to break open their money-boxes in order to buy matches and cigarettes for the soldiers, so that they were very happy.

At four o'clock the York Regiment was ordered to go farther on, and this upset us very much, as everyone had settled down comfortably. We had already prepared four bedrooms for officers in my house, and after an English five o'clock tea we had handshakes with every man. An hour later the vinery was taken by a French squadron. From that day till the 25th, day and night, we saw and we heard new troops coming in. Day after day, night after night we heard the guns booming, rifle fire, the quick-firing guns also. The houses were trembling, the doors were shaking, the windows were shivering, and how strange! we became quite used to it, and after a time we did not take any notice of all those troublesome gun-booms. I kept in the house for eight weeks with now and then a quick run into the cellars, and I slept in the cellars with wife and children and five refugees.

I am sorry I cannot picture to you a fight between aeroplanes. was on the 16th of October, at 9 o'clock in the morning, that three Taubes (German flying machines) were flying above Ypres, spying the movements of the allied forces, who were reinforcing every day. Half an hour later we saw four French and English aeroplanes chasing the German ones. We easily saw and heard them firing at each other, and meanwhile the English anti-aircraft guns were firing from below hard on the Taubes, while thousands and thousands of soldiers were trying their chances, and sometimes we all were very fearfully watching the flying machines turning round trying to surprise each other. Sometimes it happened that an allied aeroplane was below the German one. or it was above, being in both cases in danger of being hit from beneath. In all that duel lasted only ten minutes, but we thought it was going on for hours. Happily we saw a Taube flying off; she had her petrol tank hit by a bullet. The German aeroplane dropped at Brielen: the two German pilots jumped out and ran away, but were caught at Bresinghe one hour later.

Now what shall I say about my nursery? The reason it is so badly damaged is this: I have in the middle of the glass-houses a big water tower surmounted by a white painted tank, and this, unfortunately, gives the Germans a mark, so that the shells are always dropping in front, behind, on the left or on the right. On my last visit (between two shells) I counted 45 shells; 12 in the big vinery; the Carnation house, 4. One chimney is blown up (one out of seventeen). Out of six new travelling houses, just erected, three are blown to splinters, the boilers, the pipes, all are damaged. I found pipes thrown 20 yards

away in every direction. The water tank is hit, but can still be used, as there is only one hole in it, about half way up. My house and the four workmen's houses, also the office and the packing shed were unhit when I left, but let me say that what has not been smashed is broken. In all my nursery I reckon 25,000 metres of glass, this means 29,900 square yards, and nearly all is smashed or cracked. The ten-roofed Aspidistra house is the least damaged; only one roof is blown up. But as I have no coal to stoke I fear the entire stock (250,000 plants) will be frozen. Everything has been at a complete standstill since the 7th of October, and for eight weeks after I had a very lonely life in Yper. We heard no railway noises, no street noises, neither dogs barking nor cocks crowing, and birds were not to be seen. How awful all this, how dreadful! Only guns booming and the dreadful rifle firing. During the dark nights we heard the bayonet charges, we heard the soldiers shout and hurrah when they ran into each other. I think I never shall get rid of the shricking noise made by the coming shells. You can hear them coming from miles and miles away, and when they burst and you hear the boom you must call yourself a happy man; it means you are not killed!

I never shall forget the 1st of November; this was a terrible day for poor Ypres, as thousands and thousands of shells, shrapnels, and bombs were thrown upon us. There was no panic at all, because the allied officers did what could be done to prevent panic. We all were very confident in our defenders, and they all say Ypres shall never be taken by the Germans, and so it is. But Ypres will be blown and burned down by the Germans.

I thought it my duty to stay a little longer, being the responsible man of a big nursery. On the 3rd of December I assembled my family, as it was becoming unwise to risk it any longer, and we escaped on a special train and fled to Poperinghe, where we arrived at eight o'clock in the evening. We had to sleep in the railway carriages, as Poperinghe was crowded with refugees and soldiers. Bread and butter were very scarce, no matches, no salt, no gas, but all this we had become used to for a long time.

My greatest pleasure when in Poperinghe and during the bombardment of Ypres, was to visit the wounded English soldiers in the hospitals every morning. I presented them with grapes. Doing so I had special permission to go in the fighting lines, and was able to go and see my place two or three times a week. One day I found my house looted; every drawer had been turned out, every box had been forced, and I had no time to look over everything. This is anything but pleasant.

On my way from Ypres to Poperinghe I came across many heart-rending scenes. On my last visit to Ypres I buried my Civil Guard uniform, which I was once so proud to wear. When I looked on Ypres with its beautiful Town Hall blown up, its churches demolished, its

big town buildings ruined, its houses unroofed, its streets impracticable, I still found it, to me, the most beautiful town of the world, the loveliest place I ever saw, because my birthplace. I left very reluctantly, and as a ruined man, with a bleeding heart, I again went off to Poperinghe. On my way I crossed hundreds of dead horses unburied, and all kinds of vehicles broken or turned upside down. I saw hundreds and hundreds of small crosses on the right and on the left side of the road, and I could not help but read sometimes a name, sometimes only a figure. You can imagine what it means when on a single little cross one sees several figures. Oh! such sights may you never see, my dear friends!

Since this awful war has been declared I have received several letters from Mr. Brunton, President of the Perpetual-flowering Carnation Society of England, inviting me and my family to stay with him, and I shall never forget the reception we received at Burnley, where we meet only sympathy and friendship, which makes our exile less bitter. Now, upon the 31st December, the Germans are still fighting for Ypres, that is nearly two and a half months. Little Belgium, just now little bigger than its flag, so dear to us all, may it soon be reconquered!

Administrateur Directeur de la Société Horticole Yproise.

REMINISCENCES OF LIFE IN UGANDA.

Until very recent years, the number of Kew men who have gone to East Africa and Uganda has been small. As the years go on, however, the number increases and, when this Great War is over, many more opportunities will occur for Kew men in these regions. When I was appointed to Uganda in 1902 there was only one Kewite there-Mr. John Mahon-and unfortunately I lost him about three months after my arrival, when he was invalided home with sleepingsickness. He was, I regret to state, the first white man in Uganda to fall a victim to this dreadful disease. After he had gone, and I had been initiated into the mysteries and effects on its victim of the delirious stage of sleeping-sickness, I had to plough my lonely furrow until Mr. E. Brown came out from Kew to my assistance. Mr. Brown, however, was not very long in discovering the great possibilities of a planter's life, for which Uganda is admirably adapted, and he soon left the Botanical and Forestry Department for planting enterprise. He is now well known in Uganda as one of the pioneers of the planting community and an authority on coffee, cocoa, and rubber. From his pen, conjointly with that of Dr. Hunter, we received a book last year, "Planting in Uganda," which deals in particular with these three products and the general management of estates. Mr. Brown was replaced in the Botanical and Forestry Department by Mr. R. Fyffe, also of Kew, who has since specialised in rubber, and who took a prominent part in the International Rubber Exhibition of 1911, when he represented the Uganda Government. There are now, I believe, sufficient Old Kewites in Uganda and adjacent colonies to form an East African branch of the Kew Guild.

East Africa and Uganda adjoin German East Africa, and the peoples of the two countries are now in conflict. British East Africa has an area of 185,000 square miles, and Uganda about 85,000; whilst German East Africa covers about 995,000 square kilometres. When German East Africa becomes Greater British East Africa, as it doubtless will after the war, there will probably be many openings there for suitable Kewites in the planting line. When the afterthe-war boom comes, it is anticipated that there will be increased activity in the planting world. I am presuming that our Editor had this in view, when he wrote a few days ago, pressing me to write something for the Journal about the life and work of a Kewite in Uganda.

The life and work, of course, depend largely in their nature on one's offie. An administrative position under the Government carries with it, usually, work of an experimental and demonstrative nature, such as is carried out on experimental farms and gardens. Then there is always a good deal of work of an advisory character in connection with the settlers and natives. The main object of botanical and agricultural institutions is to prove, from a commercial aspect, what crops or products can be successfully raised. Purely botanical work is generally regarded as of very secondary importance, particularly in our newer African colonies; at least, from the official point of view. The classification of the indigenous plants is, however, most important work, particularly in connection with forestry. During the time I was in Uganda, I fortunately had good opportunities for botanising, and many are the interesting hours I have spent in this connection. My most happy recollections of Uganda are of the days I have spent visiting the islands of the Victoria Nyanza by canoe; of my journeys to the snow-clad Ruwenzori, the Semliki and Unyoro Forests, and the Nile Land. Many of my visits to the islands of the Victoria Nyanza were made before the inhabitants were decimated with sleepingsickness, and before it was known that the Tsetse-fly conveyed this dread disease. These journeys were therefore fraught with great danger, and I have often wondered that I escaped the fate of my predecessors.

Travel in Africa has a great fascination for one, and of those who have lived in Uganda, even if but for a short period, many long to return. The Safari life has a great hold on one. Safari is the Swahili name applied to travel, a journey, or the actual caravan.

The accompanying view (No. 1) is of a Safari scene—arriving at camp, and No. 2 depicts camp-life in a forest area. This latter scene presents rather a comfortable view of camp-life, but it recalls to me many an anxious night with marauding elephants and harassing experiences. Directly opposite the tree (I have not forgotten its name, Stereospermum Kunthianum) lies the body of one of my men who was killed but a short distance away by an elephant. I had sent out three men one evening with a message to the local chief, to request him to arrange to send in my porters' daily food sufficiently early to permit of his women-folk returning to their homes before dark, owing to the danger from wild animals. As they were walking along the road in single file, an unprovoked elephant emerged from the bush and charged the foremost of them. The unfortunate man fled in the bush on the opposite side, but was caught some thirty yards or so from the road and flung high into the air. The poor man evidently regained his legs again, but did not get far before the elephant caught him the second time. This time the elephant charged him with his tusks and completely disembowelled the poor fellow. ten days after this event that I was myself charged and knocked down by an elephant, and I well remember how clear the details of finding the remains of my porter's body came back to me, as the charging elephant bore down upon me. A well-directed '450 bullet. however, prevented my meeting a similar fate, but it was a very narrow escape.

The Uganda of to-day is very different from the Uganda of twelve years ago. We then lived in mud-houses with grass roofs, and Entebbe at that time could only boast of one building with an iron roof. Uganda was not then a cotton-producing country, nor were there any coffee or rubber plantations except the experimental ones. The outstanding feature regarding Uganda is the remarkable development which has taken place, in so short a time, in agricultural and planting industries, particularly cotton. This is largely due to the material assistance of the Government and the responsiveness of the natives.

Regarding the future prospects of Kew men in our East African colonies, I would like to say one word. In the agricultural and planting profession in the Tropics there is increasing competition, and there is an increasing need for efficiently trained men. The question of a Tropical Agricultural College has been recently to the fore, and there is little doubt that before long such institutions will be the recruiting ground for the more important tropical posts. It seems to me, therefore, that the Kew training should be followed by a suitable course in the tropical field by all those who desire to take up responsible positions in agriculture in the Tropics.

You have asked me, Mr. Editor, to tell you about my recent visit to Brazil, but I fear that I have already trespassed too much on your

space, and I will only tell you that I prefer life in Uganda or Mozambique to Brazil. The sun rises in the east and sets in the west, but my opinion is that man cannot well follow the sun in this respect. However, I have only seen the north-east of Brazil, where the negro element is very strong, and where the inhabitants will only consent to work if you ask them very very nicely. I am told that without seeing Rio one does not know Brazil, and as the war prevented me from visiting Rio, I will desist from further committing myself to opinions on Brazil.

It may interest you, however, to know that I returned to England via the West Indies and New York, and that I spent a day in the New York Botanic Gardens. I never felt prouder of Kew than on that day, as I had heard a good deal about the New York Botanic Gardens; but Kew still stands, in my estimation, as the finest Botanic Garden of the temperate regions of the world.

M. T. Dawe.

December 11, 1914.

THE KEW BADGER.

Some doubt was entertained at first whether there really was a Badger. No one had seen it, for the Badger is a nocturnal beast, and in those days watchmen in the Gardens were few.

How well the writer remembers one moonlight night in 1912, when sitting discoursing of ghosts with a friend in the Queen's Cottage Grounds about midnight, their flesh crept at the sound of loud and prolonged trampling among the brambles close at hand, how the stout night watchman was found and, thus protected, the wilds of the Cottage woods were searched with the aid of a bull's-eye lantern. Nothing in human or other shape was discovered, not even the ghost of Queen Charlotte, with whom at first we were inclined to associate the mysterious noises.

The following year, however, all doubt was set at rest, for one of the labourers actually saw the Badger and recognised him at once "because his legs on one side were shorter than those on the other." This well-known peculiarity of Badgers is, as may be learnt from early works on Natural History, an all-wise provision of Nature to enable them to run easily along the side of a hill or a furrow.

Less picturesque, though somewhat more accurate accounts of the Badger gradually came to hand; his earth was discovered in the middle of a huge Rhododendron clump in the heart of Queen's Cottage Grounds, and his presence was shown by the routed up wasps' nests and litter of bluebells on the tracks leading to the earth.

In the early summer of 1913 he forsook his usual diet of roots, etc. and took a Magellanic Goose from her nest dragging her across the

Gardens and leaving a trail of feathers to the Cottage Grounds. Shortly after he proceeded to take a Muscovy Duck also, which was sitting near the Goose by the Rhododendron Dell.

This conduct, though deprecated, was tolerated, as a Badger was considered an interesting and sporting addition to the wild fauna of the Gardens, recalling the Fox of other days, and with the Pheasants helping us to realise that Kew is still in the country, though beyond a mild rat-catching, the sporting side of the institution is not much in evidence.

Last year, however, the Badger overstepped the mark again, and sealed his fate by taking a further supply of valuable birds in the breeding season, and it was decided reluctantly that he must be evicted. On May 12th, 1914, some friends expert in the art of Badger digging arrived at Kew at 5.45 A.M. with their terriers from the eastern part of Hertfordshire, and were met by a small party of the Staff with the necessary tools. Operations were soon commenced, but it was not until after an hour's hard work with saw and axe that a workable clearing was made in the tangled mass of Rhododendrons and the real digging for the Badger could be started. It had been ascertained early in the day that the Badger was at home by sending one of the terriers into the earth—and the reception showed that he was not only at home but fully prepared to deal with unwelcome visitors. After the Badger had been located, digging in the soft sandy soil commenced in earnest, and the earth was gradually opened up. It was of interest to find the skeletal remains of two or three birds and also masses of bluebell leaves and flowers. His bed and the floor of the earth were thickly covered with the leaves, the Badger no doubt having eaten the bulbs, and many shovelsful of leaves and flowers were thrown out in the course of the digging. The workers repaired in relays to Queen's Cottage hard by for a picnic breakfast, a festivity worthy of the good days of Queen Charlotte, and the digging still went on. About 9 o'clock, all the six terriers having worked in turn, it became clear that the Badger, who had been working hard in his earth, was nearly reached. The excited hind quarters of the now brown and sandy terrier were visible in the earth, and the Badger was only a few feet away. The terrier was taken out, and all the dogs were held straining at their leashes and wildly eager to go back to their sport when, after a few minutes' waiting, the Badger solemnly walked out of his tunnel and was greeted by a pandemonium of yapping and barking. Hardly had he got clear of the hole when the leader of the party—a past-master of Badger-diggers—took him by the tail and dropped him into the waiting sack. He proved to be a solitary bachelor weighing some 27 lbs

It was an unusual procession of several very dirty people, one of whom was carrying a mysterious sack, and six straining terriers showing signs of conflict, which made its way across the Gardens that Tuesday morning before the general public entered the precincts.

A further study was afforded by the face of the taxi-cab driver into whose cab some members of the party, with the six terriers and the sack, entered and requested to be driven to Liverpool Street en route for a spot in Essex, where the Badger, we believe, now thrives.

A. W. H.

THE BROOKLYN BOTANIC GARDEN.

As the Brooklyn Botanic Garden possesses some features that are not commonly met with in botanic gardens of the Old World, it is thought that a description of some of its activities may be of interest to Kew men.

The Garden is situated in the heart of Brooklyn, a city of about 1,800,000 inhabitants. It has an area of about fifty-three acres. The Garden is administered as a department of the Brooklyn Institute of Arts and Sciences; part of the funds for its maintenance are obtained from private sources and the remainder from appropriations granted by New York City. During 1914 the amount received from the City was \$37,636, from private funds nearly \$22,000. The grounds were taken over from the City for administration by the Institute at the beginning of 1911, but work was hampered to a considerable extent owing to the fact that the laboratory building and plant houses were not ready for occupation until September 1913.

The laboratory building, not yet completed, will be a structure about 250 feet long, 74 feet wide, and 60 feet in greatest elevation; containing library and reading room, herbarium, laboratories, research rooms, class rooms, lecture hall, and offices. One wing only has been constructed up to date.

The plant houses at present consist of a curvilinear structure $104' \times 45' \times 36'$ and a range $100' \times 25'$, with partitions so as to give four temperatures. The first of the small houses is used for class work, mainly in connection with school children; the second for experimental work with plant breeding and plant pathology; and the remaining two are used to house the tender systematic collection which is to be greatly extended when room is available. The large house is being developed as an economic house for exhibiting the more important tropical vegetable products. As many plants of economic interest do not possess great beauty, this house has been laid out so as to produce a landscape effect, thus providing to some extent for the æsthetic side. A pool has been constructed for aquatic plants, the overflow being utilized to form a stream, which meanders through a small valley occupying the centre of the house. Winding paths make it possible

for visitors to see the collections, which will be planted in beds and not grown in pots. Considerable extension of greenhouse space is planned, consisting of three more houses $100' \times 25'$. Beneath two of these houses, which run parallel to each other, will be a basement in which will be located stables, tool room, gardener's office, and potting room with elevator to plant houses.

The major part of the grounds is taken up by the hardy systematic collections. A representative collection of herbaceous plants has already been installed, arranged in beds in families according to the Engler and Prantl sequence. Part of the tree and shrub collection was planted this fall, the various families being located so as to come in as close proximity as possible to corresponding families in the herbaceous section.

A feature of the Garden is the section devoted to the "local flora"—plants which grow within a radius of one hundred miles of Brooklyn. In this section also the plants are arranged in families, with the exception of those that require special cultural treatment, such as woodland and bog plants. Apart from the phytogeographical value of an exhibit such as this, the advantage it affords of showing the value of various native plants for garden adornment is obvious.

Sections devoted to Economic Botany, Morphology, Ecology, and Experimental Evolution are either partially installed or will be installed later. Provision has been made for a formal garden of considerable extent as a setting for the buildings, and also for a rock garden. Extensive experiments have been carried out in plant breeding on a piece of ground set aside for this purpose. These experiments are proceeding along Mendelian lines with the object of working out various problems in heredity. The material used in 1914 included garden Peas, Tobacco, *Ricinus*, and Maize.

A Japanese garden of some pretension has recently been made at a cost of over ten thousand dollars, and is pronounced by competent Japanese critics to be the most beautiful and perfect Japanese garden in America, judged by the canons of Japanese landscape architecture. This is situated on the shores of a small lake, and was constructed by Japanese workmen assisted by a force of labourers. In its general lines the garden follows the type familiar to English gardens.

The motto of the Brooklyn Botanic Garden is "For the Advancement of Botany and the Service of the City," and every possible effort is being put forth to live up to this ideal. No very great importance is attached to Systematic Botany, apart from maintaining the collections of living plants in plant houses and grounds, and dried specimens in the herbarium. The greater part of investigation work will be in connection with other branches of botanical science. An important phytogeographic study of the local flora has just been completed, and investigations are in progress in connection with plant physiology,

pathology, morphology, economic botany and, as has already been stated, plant breeding.

During 1914 twenty-nine different courses of study were offered by the Garden. These courses comprise such subjects as Nature Study, the Small Flower Garden, Indoor Plant Culture, Systematic Botany, Mycology and Plant Pathology, and Experimental Evolution. An exhaustive course for teachers of school gardening, covering a period from January to November and consisting of nine courses, was given.

The work in connection with school gardens and children is a very important feature at the Brooklyn Botanic Garden. ground has been set aside for plots for the use of children, and during 1914 one hundred and eighty children applied for gardens, most of them being accommodated. Apart from the value of these gardens to children, they fulfil an important function in that they provide practice, under working conditions, for those who are taking courses to fit them as teachers of school gardening. Also it may be said that they are of immense value for interesting the general public in botany and plant life, and in the educational work that is being carried on by the Garden. In addition to the outdoor work with children they are also taught in the greenhouse, and it is gratifying to see the enthusiasm with which the youngsters go about their work. Another phase of the work with children is advice and help given in the formation of backyard gardens, and in this connection the Garden distributed 25,000 penny (halfpenny English money) packets of seeds to 5000 children in the spring of 1914. Prizes were given for the best back-yard gardens, and an exhibit was held at the Garden of children's produce grown either in their own gardens at home or in a school garden.

The Brooklyn Botanic Garden issues a number of publications which include the *Record*, an administrative quarterly; *Contributions*, papers originally published in botanical or other periodicals; *Guides*, and *Leaflets*. The latter, issued free to teachers, pupils, and others, have proved to be very popular. Fourteen, published irregularly, have been issued each year since their inception in 1913. Their aim is to give popular information about plant life. The subjects that have been dealt with include: the Work of Green Leaves, Bulb Culture, and Heredity, Variation and Environment. The *American Journal of Botany*, having ten monthly issues a year, is also published by the Garden in co-operation with the Botanical Society of America, of which society it is the official organ.

Among the other activities of the Garden may be mentioned the giving of public lectures and addresses by members of the Staff, cooperation with local schools either by giving talks or by allowing classes from the schools to use the equipment at the Garden, and the supply, or loan, of material for the teaching of botany. The members of the Staff are available for consultation with reference to botanical,

pathological, or horticultural problems; the library and herbarium are open for the use of the public and, upon application, teaching guides, or "docents," are furnished to parties wishing to inspect the collections and grounds.

There is nothing of the aloofness, in this institution, which is often to be found in British institutions of a similar character. On the contrary, everything that is possible is being done to bring the people surrounding the Garden in closer contact with its activities, to inculcate the love of plants, to give an appreciation of the wonders of Nature as exemplified in vegetable life, and to advance the cause of botany by research and investigation.

M. Free.

SOME IMPRESSIONS OF NYASALAND.

As I happen to be en route for Nyasaland for the fourth time just nine years after my original departure from Kew, a somewhat retrospective survey of some of the things that interest us all, and myself in particular, is distinctly indicated, and though these may lack cohesion and appear somewhat didactic in places, the intention is not in any way aggressive or bellicose. The more I see of the world, the more I am convinced of the futility of bumping my head against a stone wall by trying to force others to accept my views on any subject, whether animal, vegetable, or mineral. The "line of least resistance" policy is one which in the long run will lead to a peaceful existence, and this is after all the greatest boon we can desire during the brief period of time in which we may play our parts on this little fragment of the solar system.

Once upon a time I would flatly contradict a statement made by someone "who ought to know," if it was to the effect that "the most suitable treatment for *Victoria Regia* is to give it epiphytic cultivation in a cool, dry atmosphere." At present I should not contradict, but be content to "suffer fools gladly," for they may be right sometimes.

The little part of the Empire to which I have been sent continues to exercise a charm as potent as at any period of my acquaintance with it, and I have no desire to forsake it for the work which claims the majority of our members, sometimes through choice, but not infrequently from necessity. My work is very foreign to that of the horticultural profession, yet the experiences of the older days were, and are, valuable to me. In every walk of life, wherever or however situated, be our progress full of hope and glory or dismal to the verge of distraction, there are always lessons to be learned, if we but cast our eyes around, and take nothing for granted.

In a rapidly developing Agricultural Department with an industry

already in the country, there is always work for about 25 °/o to 50 °/o more hands than are available. This, if one has any interest in his official duties, leaves no time for hobbies of any kind, or service to anyone outside one's immediate neighbours. "Charity begins at home," and we must do our level best to assist first those in the land where our lot is cast, and attend to the more remote when the needs at home are less acute.

Some day, when our Staff is large enough to tackle our more pressing problems with comfort, we shall all be able to work more along the lines which personally interest us most. At present we rather tend to be officially occupied in scratching at the surface of a dozen problems at once, whereas we should be equally busy, and personally happier, if able to deal more thoroughly with one problem at a time. This at first sight seems to imply lack of judgment on the part of those directing our efforts, but the question is a debatable one, especially in a young country whose future is still in the melting pot. Dealing, however, superficially with every problem, we exemplify the pretty socialistic dictum of the "greatest good for the greatest number," whilst extreme specialization probably gives immediate assistance to but a small section of the community.

The individual tendency of one ambitious and energetic is to endeavour to attain perfection in every subject, even if remotely cognate to his strict profession, but this is scarcely possible for anyone, and certainly most unprofitable from the financial point of view in these days of acute specialization. Those who are to become "Old Kewites" and wish to feel they have justified their existence, before it is too late, should have a certain objective. Do they desire to achieve wealth and position, regardless of everything else? Then let them specialize for all they are worth in some direction. Do they desire to achieve a more moderate amount of wealth and a greater degree of contentment? Then let them distribute their energies in work and in study over a wide range of subjects. The greater the range, the greater the probable contentment, and vice versa. Some discretion is therefore essential to decide the degree of diffusion or specialization in order to obtain and maintain the optimism, amount of wealth, and contentment.

The resolutions one makes in youth often require to be amended later on in life, from choice or from necessity. I left Kew determined to send a "record" number of specimens to the herbarium, together with a "record" number of plants and seeds for the Gardens. The authorities, if asked for this "record" of material sent home in nine years, would probably reply that it is almost the least of that sent by any of the "foreign legion." I should not be inclined to contradict them. The spirit has been willing, but flesh has its limitations, and without any desire to be boastful or vainglorious, I can honestly believe that those who are "models" as interpreted by "service to

Kew" in specimens and material for gardens and herbarium, have worked no harder, if as hard as myself since leaving the homeland.

Rapid locomotion, which has become such a feature in the populous centres of civilisation, has also spread to Nyasaland. Nine years ago the only method of travelling was to be conveyed in a hammock by natives, twenty miles a day being a good average speed, though when necessary it has been possible to travel over forty miles in eight hours with a picked team. At present this method of travel is nearly extinct, and the motor cycle is all important, probably over half of the adult male population of Europeans possessing some variety of machine. My duties take me to all parts of the Protectorate, and there are but few to which it is not possible to travel at an average speed of over 20 miles an hour. There are no police traps or speed limits, but plenty of pitfalls for the careless, and it behoves one to be ready for a very abrupt stop if disaster is to be avoided. For example, the "cussedness" of the native frequently causes him to remove a bridge at night, to get dry wood for a fire, when he could with less exertion pick up a sufficient supply in the adjacent forest. The motor cycle enables me to get over ten times the amount of work in the year, but it does not conduce to a greater knowledge of the flora and fauna of the country, as with petrol costing four shillings per gallon one cannot often afford to stop and go back 300 yards, more or less, to secure some brilliant specimens which may have been noted as one rushes along.

The state of agricultural development reached by Nyasaland is probably less known to the outside world than that of any other portion of the Empire. One hears on all sides of the marvellous development of the tobacco industry in Rhodesia, yet Nyasaland produces almost if not quite double the amount annually, our present exports being nearly four million pounds per annum. Cotton is a good second crop in order of importance, and though less popular than Tobacco with many growers, natives are gradually acquiring a liking for the crop, and they alone should in a few years be able to raise it to a high point as regards quantity of output. The quality has long been reported on in most glowing terms. Tea is another rapidly developing industry, and although we are in no way likely to jeopardise the growers in Ceylon and India, we shall produce a significant bulk of distinctly superior quality. There are many other crops which are grown on a smaller scale, but capable of considerable extension. One of the chief reasons for their present importance being small is a lack of settlers. Some contend that lack of transport facilities deters planters from coming to the country, but the converse proposition is equally tenable, and gradual increases in both settlers and railways will probably be best in the long run. It is not well to be in too great a hurry. Germany, had she followed up the commercial and educational policy she had so brilliantly developed in the past half century, might have possessed the economic control of the greater part of Europe, and much of the rest of the world in another half century, without having to fire a single shot, whereas by being in a hurry to attain that position, she has placed herself in a position which will probably prevent her ever again reaching the place she had attained early in 1914, even if it has not jeopardised her very existence.

Nyasaland has never had a rush of settlers, and this would appear to be due to her never being visited by millionaire magnates, musical comedy actresses, insatiable big-game hunters, or powerful potentates—otherwise "lack of advertisement." Could some Prince or Duke of the tenth magnitude visit us and die a lingering death from sleeping-sickness, blackwater fever, or other subtle tropical disease, the half-penny press would never cease referring to the fact, and the advertisement would achieve for Nyasaland that which exhibits at the Imperial Institute and lectures before learned societies have failed to accomplish.

At the present time our total European population is just over 800 in an area of 40,000 odd square miles. When women and children, officials, missionaries and traders are deducted, it will be seen that we are not crowded with planters. Of course the country is one which, according to medical authorities, is incapable of successful colonisation as is practicable in Canada, South Africa, and Australia. Individuals will come, make all the money they can, and retire to spend the declining years of life amid more homely surroundings. There is therefore little opening for the man who has to toil and earn his daily bread by the sweat of his brow. He must be a man who seeks to use a moderate capital to the best advantage. He is not likely to become a millionaire, and his brow may frequently sweat with worrying his brain when his capital is threatened with reduction to the vanishing point by insect pests, vagaries of climate, and other troubles which are not peculiar to Africa, yet appear there from time to time with an intensiveness which almost breaks the spirit of even the most robust temperaments.

Usually, a man blessed with average common sense, careful habits of observation, and not over luxurious in style of living, should make a moderate profit from year to year and enjoy life as he has rarely done elsewhere. Little need worry him with regard to health, as although decidedly malarious my experience has taught me that malaria can be avoided, without being a faddist or a crank, in respect to observing the precautions advised by the medical authorities. Personally, I have not escaped malarial fever, but on each occasion it has attacked me I could honestly say I deserved it.

E. W. Davy,

December 31, 1914.

"Somewhere near Naples."

A FEW EXPERIENCES OF AN ENGLISH KEWITE IN FRANCE.

AFTER crossing the Channel with my wife and child on a very rough night, we arrived at Paris not knowing a word of French, and were glad to find a Cook's interpreter, who got our baggage safely through the Customs, showed us where to get breakfast and people who spoke English. He then put us on the road to the Gare des Invalides. On our arrival there we could find no one to speak English, but as we had cards to ask for tickets, etc., we managed to pay our excess luggage and find the right train somehow.

We eventually arrived at Laferte Bernard, where we were to make our home. The agent's son, who spoke English, met us. Arriving at the estate, in a cider country in the heart of France, we found a nice house already furnished, with big log fires blazing away, and looking very inviting. Of course it seemed strange having no floor covering but polished oak and rugs.

The agent's son came to my assistance in taking charge of the staff of gardeners, not an easy task, as may be imagined, when one could not speak to them. My friend did not know gardening terms in English and not always in French, but with the help of dictionaries, etc., we managed to get along. He stayed three months and then went to London, leaving me on my own. I expect I said some strange things, but the French people were most kind and they helped us all they could. We have numerous friends amongst them, unhappily many mobilised now. The summer after our arrival we had a new range of Orchid houses built by Mr. Harris of Ealing. The houses when finished were quite a novelty in that part of France, and most people were interested in "la serre anglaise," especially in the Robin Hood boiler. Then a little later we had some English gardeners and an English Orchid grower.

Among my numerous duties was decorating and arranging a big Christmas tree, English style, and the place it was to be held in. We were rather pleased to show many people our way of making Christmas bright for the school children. The French Minister of Finance, M. Caillaux, and his wife were present, and they praised it very highly.

During 1911 we were very nearly scorched by the hot and dry summer, and things burnt up rapidly.

All the famous French salads and vegetables were grown, but bedding was chiefly in the English style. We planted a Kelway border and grew nearly all the best varieties of Sweet Peas. These were always greatly appreciated. Diospyros Kaki varieties grew outside, frost not hurting this handsome tree. One of the worst pests there were the Courtilliers (or Mole Crickets). They are most destructive, destroying everything they attack. The Mole Cricket does not seem

to be known in England, but is found in the Channel Islands. I had the pleasure of paying several visits to Bagatelle, where the Rose trials take place, the Rambler and Wichuraiana Roses being very fine. This popular garden is a threepenny tram ride from Paris, in the Bois de Boulogne. The gardens and palace of Versailles are well worth going to see, the former were laid out by Le Notre. The fountains are lovely in the sunlight. At the well-known gardening centre of Angers the town seems to consist almost wholly of nurseries. There is rather a pretty public garden, and many interesting things to be seen, including a statue of an English queen, Margaret d'Anjou, wife of Henry VI.

I visited the houses of Messrs. Fargetons. They occasionally exhibit in London, and have an award of the R. H. S. in a place of honour in their office. They grow immense quantities of Bouvardias and Hydrangeas. The slaty soil there turns the pink varieties of the latter blue and they are very fine. Other firms are Société de Louis Seroy and Hilaire-Bechet (for *Dahlias* and *Cannas*).

I am afraid wages are rather low in the trade there, and hours long, 5 to 7 being the rule in some places.

For private gardens I think conditions are rather better than in England, in some cases because it is more difficult to get journeymen, at least this was so before the war; what it will be like after remains to be seen. I liked being in France very much, after I got used to it, and I had the kindest employer possible.

December 29, 1914.

W. L. LAVENDER.

until recently Head Gardener to S. A. S. La Princesse de Monaco, Haut Buisson, Laferte Bernard (Sarthe), France.

KEWITES IN THE WEST INDIES.

The doyen of Kewites in the West Indies is undoubtedly Mr. J. Jones, who so ably manages the lovely garden at Roseau, Dominica, and also conducts experiments of no small importance to the planting community of that fertile island. It is with pride and pleasure that one records, in the pages of the Journal of the Kew Guild, the fact that Mr. Jones was one of the earliest, possibly the earliest, worker in the field of experiments with grafted Cacao. The importance of this work is as yet but dimly realised. There can be no doubt that future years will see the establishment of fields of known and tested varieties of grafted Cacao, with what effect on output it is as yet impossible to foresee.

It is a regrettable fact that, in the case of workers of a modest and retiring disposition, like Mr. Jones, the credit for such work is not infrequently claimed by, and accorded to, others. It is therefore all the more necessary that his pioneer work in this direction should have its full meed of recognition in our *Journal*.

Though Dominica is not a Cacao-growing island in the same sense as are Trinidad and Grenada, in which islands Cacao can be grown in extensive fields almost anywhere, yet it has the distinction of having produced, at the hands of our friend Jones, one of the first plots of grafted Cacao.

No less interesting and valuable are the experiments being conducted with Limes.

The Lime industry has become the principal one of the island, and most valuable. It is one of those few agricultural industries wherein one may look with confidence to the by-products and "side lines" to pay a considerable part of the cost of production.

The Lime (Citrus medica, var. acida) has five distinct products—fresh Limes, raw Lime juice, concentrated Lime juice, hand-pressed oil, and distilled oil. Each is disposed of in a separate market, and each, at the present time, commands high prices.

Fresh Limes go chiefly to the United States of America, where they are in great demand in the making up of fancy drinks, cocktails, etc. The trade in this fruit is yet in its infancy, though it has already assumed considerable proportions. For this trade, the fruits are picked while green, each carefully wrapped in paper, and then packed in ventilated barrels, each holding about 1600 fruit.

I am convinced that, in the near future, one of the duties of the Agricultural Department of Dominica will be the supervision of this trade.

Mr. Jones's activities have also been displayed in the introduction, propagation, and distribution of numerous valuable fruits, notably improved varieties of Oranges, Grape Fruits, and Mangoes, all of which are likely to find a demand in New York.

In Montserrat another Old Kewite has played no mean part in the phenomenal strides in material prosperity made by that island during recent years. This development has been in a large measure due to the introduction and firm establishment of the Sea Island Cotton Industry. It is not too much to say that the introduction of this industry saved Montserrat from bankruptcy.

Mr. Robson, the Curator, is one of the acknowledged authorities on the cultivation of Sea Island Cotton. The problems connected with the Cotton plant, its cultivation, diseases, insect and fungoid pests, the gradual evolution by selection and otherwise of new varieties, the ginning, baling, shipping, and sale of its produce, has by no means been the sole outlet for Mr. Robson's energies. He has also done much useful spade work (not in the limelight) in such crops as Limes, Bay Oil, Ground Nuts, and provision crops. His motto evidently is, "do not put all your eggs in one basket."

At the seat of Government of the Leeward Islands, in Antigua, Mr. T. Jackson has made a good fight under adverse conditions, climatic and otherwise. Here the Sugar-cane is the predominant crop. The

history of the re-introduction of Cotton has been both curious and unfortunate.

Its reappearance in the island was quite cometary. Re-introduced about 1903, very rapid strides were made and exports soared to a high figure in the course of three or four years. Its decline was even more rapid and quite tragic.

A prominent planter in the island recently told the writer that both Cotton and Canes in Antigua suffered from all the pests known to science and a few over—the nature of the overplus not being stated.

These being the circumstances, the efforts made by our friend in endeavouring to keep alive the Cotton industry, experiments with Sugar-canes, the introduction of such fresh crops as Limes, Coconuts, and Onions, and in connection with the formation of an Onion Growers' Association, deserve all the more credit.

At St. Vincent, a Kewite contemporary with myself has done wonders in the Cotton industry; he has also done very successful work in connection with the Government Land Settlement Schemes.

Mr. Sands was looked upon at Kew as a Kewite of great promise, and he has justified that opinion.

A man of different temperament, but at the same time a sound, careful man, is Mr. J. C. Moore, recently removed from St. Lucia to Grenada. In the latter island he will have abundant scope for his activities in the direction of assisting and guiding the peasant cultivators of Cacao, who are the backbone of the island.

The writer's energies have, for the past year, been turned in quite a different direction, that of working a logging and sawmill plant in Dominica!

The object of this article is not mutual admiration, but, at the Editor's request, to put on record, work accomplished by some of the Kewites in the West Indies.

And may I, with all respect, offer a suggestion to our Alma Mater—it is that a scheme be formulated for the special training of men who are to take up appointments similar to those held by the men whose work I have so inadequately reviewed. Unless this is done, there is grave danger that the cart will be placed before the horse, and the practical man, the worker in the field, will be completely elbowed out of all the decently paid appointments by the theorist.

December 22, 1914.

W. C. FISHLOCK.

KEWITES AS AUTHORS.

SEVERAL important additions have been made to horticultural and botanical literature by present and Old Kewites during 1914.

The contributions by present Kewites include a work of more than general interest by Mr. W. J. Bean, under the title of "Trees and

Shrubs Hardy in the British Isles." It forms two imposing volumes, and, as will be seen in our advertisement pages, was published in November by Mr. John Murray, London, at the net price of two guineas. Mr. Bean spent practically all his spare time for six years upon the work, and he is to be congratulated upon the production of a book which is likely to be the standard work on the subject for at least half a century. Descriptions are given, in clear and easily understood language, of all the trees and shrubs of any importance which are hardy in the British Isles, whilst native country, date of introduction, and special cultural requirements receive attention. In the early part of the first volume an interesting historical account of the introduction of trees and shrubs is given, together with chapters on special subjects such as town trees, trees and shrubs for the sea-side, ornamental fruiting trees and shrubs, propagation, planting, etc. The work is well illustrated, and should find a place in the library of everyone who is interested in trees and shrubs.

In June a monograph on Saxifrages was published by Messrs. Headley Bros., London. Mr. Walter Irving is responsible for most of the letterpress, and the illustrations are by Mr. R. A. Malby. All the cultivated Saxifrages are described with useful cultural hints. The book is well illustrated, and can be procured for the modest sum of 2s. 6d.

From Old Kewites we have a couple of books from the pen of Mr. H. H. Thomas, published by Messrs. Cassell & Co. One is called "Rock Gardening for Amateurs," and the other "Gardening for Amateurs." The first deals with the rock garden and rock plants in such a manner that the person with little practical knowledge can easily learn how he should proceed with the culture of rock and alpine plants. The price is 6s. "Gardening for Amateurs" is a more pretentious work and was originally issued in 24 fortnightly parts, price 7d. each. Descriptions are given of most of the plants with which the amateur is likely to be in touch, and their culture, whilst short chapters and notes occur on all sorts of horticultural questions.

"Planting in Uganda," by Messrs. E. Brown and H. H. Hunter, deals mainly with the culture of Coffee, Para Rubber, and Cocoa in Uganda, and forms a very useful work of reference for planters in Uganda and other parts of Africa. Published by Longmans, Green & Co., the price is 10s. 6d.

"Maize: its History, Cultivation, Handling and Uses," is the subject of a book by Mr. Joseph Burtt Davy. It deals exhaustively with Maize, and is a work of considerable value to all who are interested in this cereal, whether from the cultural or any other aspect. It is published by Messrs. Longmans, Green & Co., price 25s.

The third edition of "The Horticultural Notebook," by Mr. J. C. Newsham, has been published by Messrs. Crosby, Lockwood & Son

price 4s. 6d. The value of this book to the gardener has long been known. In collaboration with Professor Wrightson, Mr. Newsham has recently issued "Agriculture, Theoretical and Practical," published by the same firm, price 6s. It is a text-book of mixed farming for large and small holders, and contains much useful information for agricultural students, to whose library, and that of the progressive farmer, the book will prove a valuable addition.

Messrs. Maclaren & Sons, Ltd., London, have published a second edition of "Tropical Gardening and Transplanting," a work by Mr. H. F. Macmillan, which has for some years been popular with planters in Ceylon and other tropical countries.

Prof. H. H. W. Pearson has edited "The Annals of the Bolus Herbarium," published by the Cambridge University Press, price 5s.

MR. E. H. WILSON, V.M.H.

This famous traveller and plant-collector has been spending the last twelve months in Japan, working for the Arnold Arboretum and a number of private subscribers in America and England. Mr. Wilson's chief point of attack has been the mountains of South Japan, which do not appear to have been explored by plant-hunters to anything like the same extent as the more northern parts. Mr. Wilson is expected back at the Arnold Arboretum in January and, from what we have heard from several sources, his expedition has been a very successful one. In the number of his expeditions he has now equalled the record of Robert Fortune, who also went to China four times and once to Japan. In the extent of his travels, in the hardships he has encountered, and in the number of plants he has introduced to cultivation he has far exceeded Fortune. Of the magnitude of his labours (without counting what he has done in Japan) some idea may be gathered from the following: introduced about 1500 different species of plants by means of seeds, cuttings, and bulbs, most of which were either quite new to cultivation or very rare. Many of these had previously been discovered by Prof. Henry or by French travellers, but so far as identified he is known to have discovered 400 new species—a number which will be increased very considerably by the time the whole of his collections have been worked up by botanists. During his Chinese travels he made 65,000 sheets of herbarium specimens.

Previous to his departure for Japan Mr. Wilson was entertained to a farewell banquet on New Year's Day 1914, by the Horticultural Club of Boston, U.S.A., of which he had been Hon. Secretary for some time during his residence in America. Following the report Mr. Wilson was presented with a gold watch-chain and locket, and brooches for Mrs. Wilson and their daughter.

Mr. Wilson is a native of Chipping Campden in Gloucestershire, where he was born in 1876. He came to Kew in 1897, and his first

two Chinese journeys (on behalf of Messrs. Veitch) were made in 1899–1902 and 1903–1905. The last two journeys on behalf of the Arnold Arboretum were made during 1907–9 and 1910–1911.

LETTERS FROM OLD KEWITES.

Mr. James MacGregor, who left Kew in September 1874, writes from Braintree, Mass., U.S.A. on September 18, 1913:—

"We are just having our first frost on the 15th of Sept. very much reminds me of forty-two years ago, that being the first year my wife and I came to settle in America. The winter that followed was the coldest I ever remember, and my memory held good in observations in those days, as I was pretty well drilled in my apprenticeship days, being junior clerk for the weather man. I would say after Thanksgiving Day, which comes the last Thursday in November, winter set in for all it was worth; it was the first time we had seen a sleigh, and the sight was fine. The snow continued to fall, and the more it fell the stronger became the enthusiasm for sleighing. It continued up to about the twentieth of March, with the thermometer scarcely ever above zero in the mornings; of course, through the day, it would get higher by sun heat. My wife and I had purposed that we would try farther south, as we had then made our abode at Albany, New York. But conditions change one's mind, and I got into an illustrating house, for I had quite a little ability as a draughtsman. I soon became quite expert, and having a great love for the work was able to command a fairly good salary, and in this way I got indoors, so that I was not exposed to the cold. I did not mind the heat, for I think we have had such warm days in summer in England. During the last thirty years the climate has moderated considerably; we have winters that one can enjoy, though colder than an old typical English winter. March 1888 was the last winter that we had snow good and heavy; it was delightful to see it come down, and it went about as fast as it came.

"As to turning my attention to gardening, it was soon spoiled in the prime of life, when I had all the energy and ambition for it. There were only a few gentlemen's estates in the vicinity and posts were all filled, and my hope was to wait, though the prospects were such that I might have still been on the waiting list. When I came to America it was like following my friends, not that they had struck a gold mine, but that the chances were more advantageous than they were in England or Scotland, and this I maintain myself to this day. I love the American people, and now I call myself one of them, for my living has been made amongst them, and our children to be sure are all Americans. When they first go to school they have to honour the flag, as it is hoisted over every school while the scholars are in session, and when they are dismissed the flag comes down, and again the next morning up it goes. It is easily understood why we soon become Americanised.

"I was for a great number of years very successful in the business of illustrating, engraving, and lithograph printing, which I took a great liking to. It grew from day to day, though not to a large extent, until by some mishap a fire destroyed mostly all I had to do business with. At such times there are a great many Job's sympathisers. I acted on the advice that we should make one large plant and that I should be President of this great corporation, but this did not suit me, so I withdrew. Coming to Boston, which is two hundred miles east of Albany, on the coast, I have remained here in this suburban town, in business as a landscape gardener and nurseryman, going wherever I am called.

"All I have against this part of the country is that we do not exactly know what we have to come up against in regard to climatic changes, yet there is seemingly a great abundance of fruits which do well here out-of-doors, including Grapes and Peaches; the Peaches as good to look at as ever were grown in England under glass. Vegetation matures quickly, and our fall, or autumn, is very beautiful; the colouring of the foliage after our first frosts is magnificent.

"This is certainly a fine country, with room enough for everybody. A friend of mine has just returned from Portland, Oregon, where he has been looking up the growing of Peas for the retail trade. He says he was never more surprised in his life; if it were not so far west he would be tempted to go and live there among the most beautiful Roses he ever looked upon, and growing so thrivingly. Talk about the English Hollies! The English Holly at home is not in it, while the English Ivy grows most beautifully. Round Boston the Hollies and the Ivies have to be protected in most situations; so also do the Roses.

"My life in America has been a very happy one, and the God we adore has given me the best wife that ever was given to a man. I would like to tell dear old Mr. Granger, if he is still alive, that it was the best knot that the Revd. Nott, the Vicar of the little Church on the Green, ever tied. My wife, when she was a young woman, used to know all the young gardeners that came and went. This was in the period of the two John Smiths. Kew is really her home, and we have thought long before this time we should have been over to have a look at the grand old place. Its like is not to be found in this country. Politics are the ruination of this country at the present time; something like the people we are reading about that go under the name of Suffragettes in England. The poor creatures! We have a great deal of compassion for them, and have been thinking of clearing out some island and inviting them to come to it, if England will not do it. Then they can have all the Votes they want and no one to molest them."

Miss Edna M. Gunnell writes as follows from the Horticultural College, Swanley, December 31, 1914:—

[&]quot;Since leaving Kew I have travelled and held various posts in

Germany. So the following notes, though they lay no claim to completeness, may still give some idea of various methods of horticultural education. The most interesting position I have held was that of Co-Principal of the Horticultural College for Women at Godesberg, a gay little place on the Rhine, opposite the well-known Siebengebirge and about midway between the two old towns of Cologne and Coblenz. My many visitors found Godesberg a delightful holiday spot, near the valleys of the Moselle and the Ohr, and the rather grim but interesting range of volcanic mountains called the Eifel. The land is fertile and the climate, though somewhat continental, is not extreme. The greater heat in summer extends the possibilities of fruit culture, so that in fortunate years Peaches are as plentiful as Pears. These Peach plantations are owned mainly by peasants, and look specially charming in spring, when the tiny villages nestle behind a veil of deep pink bloom. Vineyards, too, are characteristic of Rhineland, but they are truly a disappointment if one expects graceful vines and luscious berries. vineyards lie on very steep, sunny slopes and are severely regular in planting and training, and suggest nothing more interesting than rows of poles covered with greenery. Vines, of course, are under Government control, being inspected and counted several times a year. The regulations are irksome: one may neither plant nor propagate without permission, while the introduction of new varieties is well nigh impossible. Such restrictions guard against the dreaded Reblaus, which has ruined extensive districts of vineyards in France and Germany.

"To turn to Horticultural Education:—My own work fell first in the mountains of Bohemia and afterwards at the Gartenbauschule für Frauen at Godesberg-am-Rhein. I am also familiar with the methods of the State Colleges; the most important are Dahlem near Berlin, Proskan in Silesia, and Geisenheim on the Rhein.

"Like Kew, these colleges require from their applicants previous experience in practical gardening, varying from 2-4 years. courses of instruction, open in most colleges to men and women, are characteristically thorough, covering in detail cultural methods of fruit. vegetables, and flowers, plan drawing and surveying, and the usual sciences. Professional training for women has made remarkable strides during the last half dozen years, the students being keen, good workers and developing into capable gardeners. In the case of our college at Godesberg this eagerness to learn has resulted in a very happy custom. Every year a journey to some foreign country is arranged for the students to study horticultural methods, the art of gardening, and the specialities of other lands. In May 1912 and again in 1914 I brought about 15 German students to England, where nearly a fortnight was spent in visits to various gardens, notably Kew, Windsor Castle. Hampton Court, and the Horticultural College at Swanley, our visit terminating with the Chelsea Show. Special arrangements were generously granted, and the students not only gained a much wider

idea of horticulture but were delighted with the beauty of the gardens and the welcome they received everywhere In previous years visits were paid to Belgium, and to Holland with its excellent nurseries, intensive culture, and world-famed fields of bulbs. This enterprising idea might well be adopted by our own students, who would not only learn new methods but also be introduced to a most charming side of German life. The customs and festivals there are delightful, not merely Christmas and the rather wild Carnival, but Niklas, the children's feast, and Advent, when Advent's Stars and Crowns illuminate the decorated rooms.

"Remembrances such as these make one look forward to the time when interchange of visits will again be possible.

"I was in Brussels at the end of July on a visit whilst the Belgian troops were mobilizing. Returning to Germany I reached the frontier, where everyone was held up. With hundreds of reservists we had to walk to the nearest railway station at 3 A.M. I remained in Germany a few days during the mobilization of the German army, and returned to England in time for mobilization here.

"With greetings to all Kewites for 1915."

Mr. W. H. Judd writes from the Arnold Arboretum, Mass., U.S.A., on December 9, 1914:—

"We who reside far away from the sound of battle are anxiously wondering if the much looked for Journal will find its way to us in the New Year, for I notice amongst others of our members that the Secretary has responded to the call of duty. Let us all hope that those members of the Guild who have gone out to the war, will be able to return, none the worse when the war is over. Many and various kinds of businesses have been severely crippled in this country owing to it, but we expect a boom in trade afterwards. The Arnold Arboretum continues to prosper nevertheless, although there will not be so much planting done as usual this spring. The war prevented us shipping any plants to the continental countries of Europe this fall, although quite a number found their way to England, especially the newer species of Rhododendrons recently introduced from China. The trees and shrubs flowered and fruited fairly well this year, and especially prolific were the Oaks, but these suffer considerably from the attacks of some insect that produces a maggot in almost every acorn. The summer was a very dry one towards the latter end, for we were 47 days without a drop of rain. After the end of July and even at the present time, Dec. 8, the soil is quite dry a few inches below the surface.

"Several Old Kewites have made visits here during the past year, visitors who are truly welcome at any time. There are such a number living around the cities of New York and Boston, one is led to suggest that it will soon be time for us to try to arrange an

annual dinner over this side of the Atlantic, say for instance, one year at New York and the next at Boston.

"During September a visit was paid to New York and district that proved very interesting. In Central Park some very fine Paulownia imperialis were noticed, while in Prospect Park, at Brooklyn, were many fine trees and shrubs, especially Liquidambars; also growing in a small pond was a rampant collection of Nelumbium speciosum, that could hardly succeed much better in its native home. Here, at the Botanic Gardens, Free and Allt were discovered; they undoubtedly have some hard work before them to convert a wild and barren spot into a beautiful garden. Down at Rutherford, New Jersey, a visit was paid to Jennings, who is 'making good' with the firm of Bobbink and Atkins, while close by is the flourishing business of Roehrs, so celebrated for their success with Orchids. Another day was spent down on Long Island, while on Danas Island on the Sound were noticed many fine specimens of rare and interesting trees and shrubs. Such subjects as Abies grandis, 40 ft., A. Pinsapo, 40 ft., Pterostyrax hispida, 25 ft., Chimonanthus fragrans, Cornus Kousa, Osmanthus fragrans, and others appear to flourish, reminding one of the south of England, though they are not a success with us at Boston, no, nor even on Long Island itself to any extent.

"Another visit was paid to parts of the State of New Hampshire during August, where I noticed and collected specimens of many interesting wild subjects. To find a brook-side scarlet with Lobelia cardinalis is truly a pretty picture, and to see the hillsides clothed with great specimens of Betula papyrifera, exceeding far in beauty the 'White Lady' of the English woods, especially during winter, is a glorious sight. Under these grow quantities of Viburnum alnifolium, and the spreading Taxus canadensis, while the ground may be carpeted with Epigæa repens or Adiantum pedatum. Whole hillsides sometimes have an undergrowth of Kalmia latifolia. In another spot was found over an acre of Calluna vulgaris, presumably resulting from seed sown years ago by some settler from the 'Old Country.' In quite a boggy place were found large quantities of Caltha palustris, while other swamps during the latter end of June and most of July are often full of the lovely 'Swamp Honeysuckle,' Rhododendron viscosum. truly very beautiful and looks too good for such a situation.

"One could fill a book with this sort of chat, but space will not permit. We should like to see more letters from fellows in out of the way parts of the world, telling us about their wild flora. Let us have one or two from Australia; it is not often we get much news from that quarter."

Mr. Arnold Duley writes from Harraks Koreiz, Crimea, on February 17, 1914:—

[&]quot;Thanks for your letter and Journal received. In regard to the

图300

cost of living at Batoum I am afraid I cannot give you any figures, as I have never met anyone who has lived there. Here I pay twenty roubles a month for my food, and for that I get lunch and dinner-two good dishes, and very often a sweet at each. Tea and coffee are extras! Russians have a light breakfast, just coffee and rolls. The meal we call lunch they call breakfast (Zaptrack), but rich people out here are not very early risers as a rule. Russians of all classes live much more simply than do corresponding classes in England; their houses are more simply furnished, and they are content with less room. Money has not the same purchasing power that it has in England; clothes and boots are dearer, and I should advise anyone coming out this way to bring a good stock of both. The climate at Batoum is sub-tropical, so duck-suits, etc. would be very suitable for the summer. I find it pretty hot here during July and August, when the temperature rises to the nineties. I believe Batoum is a very nice town, with an The population is very cosmopolitan, Greeks, English colony. Armenians, Tartars, Turks, etc., but the Russians have well 'Russianised' the place. If I stay here I hope to pay Batoum a visit, as I could easily go across by boat from Yalta. A new Botanic Garden is being laid out there by the Russian Government for the purpose of introducing economic plants to cultivation. Personally I don't regret coming out here, though I sometimes find it a bit lonely. I only know one Englishman in Yalta, though I have met a good many visitors at various times. There is not much natural wealth in the Crimean Riviera, but the climate and scenery are delightful; most of the Russian aristocracy have residences here, and hundreds of well-to-do merchants live in comfortable villas. The Czar is in residence at his Palace of Livadia in spring and autumn, which are the two social There is also a constant stream of visitors during the seasons. The winter is no colder than the south of England, but is very much drier. The flora of this district is not particularly interesting; I have been on excursions to the mountains, but the vegetation there is very limited, consisting chiefly of *Pinus taurica*.

"I should think the Caucasian region would be a promising field, and I very much doubt if it has been thoroughly explored. There are still a few bandits and wild tribes in some parts. If I hear of any good openings suitable for Kewites I will let you know, but I am afraid the field is not a very promising one from the £ s. d. point of view."

Private G. T. Philpott, who is with the 6th East Surrey (Territorial) Regiment, writes from Fyzabad, India, December 10, 1914:—

[&]quot;We arrived here on Sunday, December 6, after a journey of 5 weeks and 3 days, 5 weeks on the sea and 3 days in the train from Bombay to Fyzabad. It is hardly necessary to say we were thankful to get to our destination. As it gets dark here soon after 5 P.M. we have not yet had an opportunity of exploring the district. It is the cold season,

but quite warm enough during the day, though very cold at night, particularly just before daybreak, when it is difficult to keep warm in bed. During the voyage out we were held up for a week in the Suez, and 3 days at Aden. From what we have since heard, the Turks were causing trouble 30 miles from the Suez Canal, and it was at one time decided we should disembark. They are not killing us with work: physical drill for one hour from 6 A.M., rifle practice 10 A.M. to 11 A.M., and marching for another hour from 5 P.M. Thursday is observed as a holiday, giving us time to write letters for the mail, which leaves for home the same evening. I have not yet seen any of the "splendour of the East"; rather the reverse. The native bazaars are queer dirty places, the shops (so called) are about 12 feet square, built of mud and stand about 2 feet above the level of the road. The proprietor squats in the middle of the shop, surrounded by his goods. Generally there is a seat in front of the shop for customers to sit on while bargaining, as the seller always asks much more than expected for everything; he seems very disappointed if the first price asked is given without any trouble. Sometimes a buyer will sit for an hour and seem to enjoy the job.

"Ted Ruck is with me and wishes to be remembered to you. We are both looking forward to receiving the *Journal*, and all the news from home."

[It is interesting to record here that Mr. Philpott was the first Volunteer from the Gardens to join the army. He had previously served in the Territorials before coming to Kew, but was not a member when the war broke out. Mr. E. Ruck, another young gardener, who is with him, was a member of the local Territorials when war was declared.—ED.]

Mr. H. J. Moore writes as follows from Queen Victoria Park, Niagara Falls, December 9, 1914:—

'It did me good to learn that so many of the Kew men are assisting the Empire in its time of stress. I know a number of those who have gone from the Falls; they will make excellent comrades, and when I think of those I knew in Kew, and of those who have been my friends here, fighting side by side, from conditions and lands so widely different, one realizes that the same kind of stuff permeates the whole Empire."

Brother Francis Gammon writes as follows from St. Joseph's Retreat, Burwash, Sussex, February 23, 1914:—

"Many thanks for the Journal with its welcome news. I don't know what Kewites would do without it. To those like myself, who are completely out of touch with Kew, it is the sole link of the chain which connects us with the past. I am here at a kind of house of studies, where the time is occupied in the various branches of learning necessary for our work as teachers. After this year I have a three years' course of Philosophy to be followed by four years' study of Theology in Belgium or Italy, then I may be ordained, if fortunate.

"We have nearly two acres of garden that affords me endless delight. I find nothing to equal a few hours' digging as a cure for brain fag.

"I was very grieved to hear of Dodd's sad end. Personally I did not know much of him at Kew, but there was no one in the place more respected or popular than Harry Dodd. Truly life is an uncertain thing!

"I am pleased to see the Football and Cricket Clubs are in full swing and that a Swimming Club has been inaugurated. I wish it had been in existence during my time at Kew.

"You will be interested to hear that we intend making a collection of the local flora this summer, thus allowing me to renew acquaintance with many old friends. This neighbourhood is a very promising one, and I hope to find *Hymenophyllum tunbridgense*.

"I must not omit to say that the prefix "Brother" refers to the religious habit, black cassock and Roman collar, received last October."

THE KEW ROCK GARDEN.

The illustration shows that portion of the Kew rock garden which was rebuilt in the late autumn of the year 1912. It forms part of the site on which stood the well-known Dripping Well.

Most Kewites will remember the rock garden as it was before alteration, overhung with large trees, and composed of various materials ranging from mountain limestone to brickbats and tree-roots. The trees have been gradually removed, and it was then decided to replace the mixed stones with rocks all of the same kind. Mountain limestone from Cheddar was selected, and this was supplied by an Old Kewite, Mr. G. Mallett, of Cheddar.

The first portion taken in hand in 1911-12 was that part in the centre which was occupied by two large Pine trees. These were taken down and the ground made much higher in order to vary the original level. Between the two hills is a recess which now contains most of the Saxifrage collection. Opposite the end of the Orchid houses a new entrance, consisting of steep steps had been made a few years previously. These were taken away and a gentle gradient substituted.

In the following year the part extending from the centre path leading into the herbaceous ground to the south end was rebuilt. The Dripping Well was removed, and the bog garden made considerably larger. A waterfall in the form of a cascade was made which is shown in the photograph. Being taken soon after the work was completed it naturally looks rather bare. In a season or two it will assume a more normal appearance when the plants have had time to grow.

The south-western quarter was remodelled in 1913-14, and there only now remains the north end, which for obvious reasons was not proceeded with this last autumn.

IN MEMORIAM.

JESSIE JANE CLARK.

In the last *Journal* mention was made of the resignation from the Herbarium of Miss Clark owing to ill-health, but few of us expected to receive news of her death before the *Journal* was in the hands of members.

The news of her untimely end on February 2nd, 1914, after a long and distressing illness, was received at Kew with very deep regret. Miss Clark was born on August 25th, 1881, and was, therefore, only 32 years of age. Her early education was obtained at the Southend High School. Subsequently she spent four years at University College, Aberystwyth, and from there gained the B.Sc. degree of London University, passing with First Class Honours. She afterwards held an appointment as Science Mistress at her old school, and later as private secretary to a literary gentleman.

Miss Clark was the first lady to compete for a post in the Herbarium, and in 1909 she succeeded in heading the list of a limited number of competitors for the vacancy caused by the retirement of Mr. Hemsley. Although Miss Clark's period of service at Kew was considerably interrupted by ill-health, she proved herself to be a careful and trustworthy worker, and gained the confidence and esteem of her colleagues. She rearranged the Gymnosperms according to monographs, and the neatness and methodical manner in which she accomplished the task will be evident to all having occasion to consult this group in the Herbarium. Her work also included the determination and arrangement of the Calycifloræ, and she occasionally assisted Mr. Rolfe with the Orchidaceæ. Her scientific papers were necessarily few; they included an interesting note on "Abnormal Flowers of Amelanchier spicata" and several diagnoses of new species, chiefly of Tropical African plants, with a few descriptions in the Botanical Magazine.

But it was not only in her official capacity that Miss Clark made her presence felt at Kew. She was a keen sportswoman, and took an

active part in the somewhat limited recreations of the Staff, being a member of the Tennis Club Committee, and a very keen player of the game, as well as of hockey. To quote the obituary notice in the *Kew Bulletin*, "to those who knew her best, her patience and courage under the trials of failing health will always be a reverent memory."—J. H.

WILLIAM BRADBURY LATHAM.

As we go to press we learn with deep regret of the death of William Bradbury Latham, which occurred on the 17th December at 1, Green Hill, Leighton Buzzard. Mr. Latham was one of the oldest—if not the oldest—of Kew's most distinguished sons, having left Kew so long ago as 1857.

His portrait, with the chief events in his horticultural life, are recorded in the Guild *Journal* for 1903, and it is thus unnecessary to recapitulate the whole of his career.

Latham was a good example of what may be attained by intelligent and painstaking industry, as is well shown by the zeal with which he set himself in his youth to acquire a thorough knowledge of his profession; scorning the mere pleasures of life, for those of the student.

How strenuously he worked in this direction during his stay at Kew, was often described to the present writer; and how necessary it was for him to practise economy in the way of living, since the wages of that period were much smaller than they are at the present day, and the educational advantages much more limited. Moreover, the Kew men who in those days wished to visit London had no railway to travel by, but had perforce to pay toll over Kew Bridge before they could get an omnibus to carry them thither.

Upon leaving Kew we find the desire for knowledge further shown by his making his way to the famous Chatsworth gardens; and then after a time moving on to the Jardin des Plantes at Paris, where the pay was of the most meagre kind; and only one who had a genuine thirst for self-improvement would have voluntarily foregone the greater comforts which might have been his.

It is worthy of note that during the time he was at Paris, the only plant in Europe of the white Lapageria was under his charge; and Latham was fond of recording how he believed he saved its life. The plant had been sent to Paris with instructions that the soil in which it grew was of a marly nature, and in such a soil the plant had been planted, only to eke out a sickly and dwindling existence. Mr. Latham had, however, early learnt the valuable lesson that plants which in nature might grow in a particular kind of soil did not always succeed in the same kind of soil when placed under cultivation; and he persuaded his chief to let him wash it out of the marly soil and pot it into rough peaty soil with plenty of sand and crocks, following which the plant grew luxuriantly.

After a profitable time in Paris, we find him returning to London

and spending a short time in the classical Holloway nurseries, at that time in the zenith of their fame, whence he obtained a headship in a famous Durham garden noted for its fine collections of indoor plants of all kinds. Here he acquitted himself so ably, that when he applied for the Curatorship of the Birmingham Botanical Garden upon the retirement of Mr. Catlin, he was selected for the post.

And now came Mr. Latham's great opportunity. Under the earlier Curatorship of Dr. Cameron and Mr. Catlin, the Birmingham garden had acquired a very high place in the horticultural world, as is evidenced by the many figures of interesting plants described from the garden in some of the older works, such as "Maund's Botanic Garden" and "Edwards's Botanical Register." Mr. Latham's training and cultural ability were such as enabled him to maintain and even surpass the best traditions of the garden, and the collections of plants continued to increase in variety and interest, until in 1885 no less a sum than £4000 was collected by voluntary subscription to increase the glasshouse accommodation for the plants of all kinds which had been got together. The Ferns, upon which Mr. Latham was quite an authority, were very rich in rare species and well-grown specimens, as also were the Orchids. But Mr. Latham, although he had his favourites, was no specialist in the strict sense o the term; his interests were rather of that more general character which make a successful Curator of a botanic garden, and ensures that each and every department shall be thoroughly representative in interest and variety.

Naturally a collection of plants of this character lent itself to the work of the hybridist, and in this department of science he rendered signal service to horticulturists among Ferns and Orchids.

As a man, Latham was of a rather retiring and nervous disposition, and could rarely be persuaded to talk much. When, however, he could be prevailed upon to discourse, he was always very instructive and enlightening, and one always felt at such times that one was dealing with a sympathetic master of the profession.

To those of his young men who evinced any desire to help themselves he was always encouraging, as it was his dictum that unless a man strove to help himself, it was useless for others to try to help him. The true endeavour must always come from the individual.

Mr. Latham sat for many years on the Orchid Committee of the R. H. S., and was also untiring in the interests of the horticultural life of many Midland societies, either as Chairman or Treasurer. The Gardeners' Association of Birmingham owes him a debt of gratitude, as he always took a deep interest in this society from its inception, and was always keen upon developing it as a real educational centre. To this end he started a series of competitions for essays by the young men, which bore good fruit.

Retiring some years ago upon a small pension, and full of honours, he spent several years with his niece at an old farmhouse at Rowington in Warwickshire; but owing to increased infirmities, about two years ago he removed to Leighton Buzzard so as to be near other relatives.—W. H.

MORDECAI CUBITT COOKE.

Dr. M. C. Cooke, the celebrated veteran mycologist, who died on November 12, 1914, in his 90th year, was for many years intimately connected with Kew, being at one time in charge of the Cryptogamic collections in the Herbarium.

Born at Horning, in Norfolk, on July 12, 1825, Cooke was an example of a man who, through hard work and perseverance, reached a position of considerable distinction. His early education was very meagre, but under his uncle's tuition he applied himself to languages and mathematics, taking at the same time an interest in natural history, especially botany. After serving as an assistant in a draper's business, and as a clerk in other spheres, he obtained a post as teacher in a school at Lambeth, and, later, a position in the India Museum. It was here that Cooke concentrated his energies on the Lower Cryptogams (Fungi, Lichens, and Algæ) and thus obtained the special knowledge which ultimately gained for him his appointment at Kew.

During his tenure of office at the Herbarium (1880–1892) Cooke accomplished an enormous amount of work. Sorting out, naming, and arranging collections during his official hours, he devoted his spare time to writing scientific papers and books, and to editing a Cryptogamic Journal. It was during this period also that he brought out his famous "Illustrations of British Fungi," a work of 8 volumes containing 1200 coloured plates. Gifted with an easy flow of language and a ready pen, he wrote, in addition to his purely scientific books, a number of others of a more popular character.

Cooke was also in close touch with the horticultural side of mycology. Succeeding Berkeley as the authority on fungi in this country, he received a large amount of diseased material for examination, and from this he detected and described many new fungi attacking cultivated crops. He was a frequent contributor to the Gardeners' Chronicle, and he did much work for the Scientific Committee of the R. H. S. His last published work, "Fungoid Pests of the Garden," appeared in the R. H. S. Journal (1902–1904). Dr. Cooke received many honours. In addition to honorary degrees, he was a V. M. H. (1902), and had the distinction of being awarded the Gold Medal of the Linnean Society for the year 1903.—A. D. C.

ADRIANUS KOOPMAN.

It is our sad duty to record the death of Adrianus Koopman, one of our younger Dutch members. Our late friend was employed in the Fruit-tree Department of Messrs. Bobbink and Atkins at Rutherford, New Jersey. Working in the nursery, Koopman was busy using a sharp knife cutting a young tree. By some means the knife slipped, making a deep cut in his leg, severing an artery. A doctor was called immediately, and at first the cut was not considered serious. He was taken to the boarding-house where he lodged, and in a few days walked about a little. Blood-poisoning, however, set in, Mr. Koopman was removed to St. Mary's Hospital, and his employers called in the services of three doctors; but despite every care and attention, their patient gradually got worse, death taking place on March 27. His burial took place two days later in Berry Lawn Cemetery, numerous fellow employees and friends following the body to its last resting place. According to an American paper there were many magnificent floral tributes, including one from his employers.

Adrianus Koopman was born on April 3, 1884, at Avereest, near Zwolle, Holland, and served his apprenticeship at the Flora Nurseries, Zwolle; leaving there he worked for a time at Aalsmeer, near Amsterdam. In the spring of 1907 our late friend came to England, and for 6 months was engaged in a nursery at Waltham Cross. His term at Kew extended from September 1907 to February 1909. For the next 18 months Koopman worked at Leamington Spa, Warwickshire. In September 1910 he went to America, and was employed until his death in the nurseries of Messrs. Bobbink and Atkins.

The high esteem in which he was held may be judged from the following letter written by Mr. J. Jennings, an Old Kewite employed in the same nursery:-"It is with deep regret I write to inform the Kew Guild of the untimely death of one of our late friends and members, namely A. Koopman. Those of us who were at Kew with him knew very little of him outside of his work, as he was a man of very quiet disposition. Nevertheless, when we began discussing horticulture in any branch he was at once enthusiastic and interested, being a familiar figure at the Mutual Improvement Society. He went about his business with a quiet determination of doing it well. When I came to Bobbink and Atkins the first man to shake hands and welcome me was Mr. Koopman. I found him just his old quiet self, still strictly adhering to his own work, which he did with exactness and enthusiasm. There is a deep feeling existing between Old Kewites, especially those of the same time, and we two had many a good talk over good old Kew times. It was only at these talks that I was able to dig a little below the surface and find what a really fine man our lost friend was, and always I felt like saying, 'All the world might stand and say-There was a Man."

JOHN TURNBULL SMITH.

Some of us had rather a shock recently when we read in several evening and Sunday newspapers that a son of a former Curator of Kew Gardens had died in Hackney Workhouse. With the following headlines, "Workhouse Courtship," "Man of Brilliant Attainments who Lost a Fortune," "Sweetheart Clings to a Man who Ran Through a Fortune, for Twenty Years," and "A Highly Educated Inmate of the Hackney Workhouse Dies Suddenly," newspaper correspondents were able to furnish their readers with a romantic story. We reprint the following particulars from the Gardeners' Chronicle:—

A Curator's Son.—The Evening News of December 5 contained a rather sordid account of Mr. J. T. Smith, aged 53, who died suddenly in Hackney Workhouse. He was described as a man of "brilliant attainments" who had been unable to find employment and had been in the workhouse for four years. It was also stated that his father, a former Curator of Kew Gardens, had left him a fortune, which he lost through investments on the Wool Exchange. When I joined the Kew staff in 1879 the Curator of the Gardens was Mr. John Smith. He had a wife and two children; the elder, a daughter Elizabeth, was 24 when she died in 1882. Mrs. Smith, the wife, died in 1884, aged 59. In May 1886, owing to health failure, Mr. Smith resigned the Curatorship. He went to live in a villa at Twickenham, where he died in 1888. Till then the son lived with his father. He had some kind of clerical occupation in London, but I am afraid he was not capable of serious work. The father had saved a little money (not much), and this on his death was doled out to the son by the late Mr. Jordan, a family friend of the Smiths. I am not certain of the amount, but I have an idea that it provided the son with 10s. a week. This patrimony had almost become exhausted when John persuaded Mr. Jordan to let him have what remained to get to Canada and try his luck there. He went, but did not succeed, and a few years ago he returned to this country penniless. He obtained some kind of employment and managed to keep going for a time. He applied for employment "of any kind" at Kew about four years ago, but, in the words of the late Director, "Kew is a place of strenuous work where no man who cannot do a competent day's labour has a chance." We all liked Smith, and some of us helped him, and we are very sorry that his life ended in the workhouse.-W. W.

We are also able to publish two portraits of Old Kewites, the obituary notices of whom have appeared in previous Journals, that of Mr. Henry Bevan in 1913 and Stefan Küffel last year.

KEW STAFF (December 31, 1914).

	Intered Kew.
Director *LtCol. Sir David Prain, I.M.S., C.M.G., C.I.E.,	
F.R.S., V.M.H., M.B., etc.	1905
Assistant Director*Arthur W. Hill, M.A., F.L.S.	1907
Assistant, 2nd Class John Aikman	1888†
" " "William Nicholls Winn	1890†
	1900
Assistant, 1st Class. George Massee, V.M.H., F.L.S. """ Charles Henry Wright, A.L.S. Robert Allen Rolfe, A.L.S. Assistant, 2nd Class *Sidney Alfred Skan """ T.A. Sprague, B.Sc., F.L.S. """ Arthur Disbrowe Cotton, F.L.S. """ Muss Elsie Maud Wakefield, F.L.S. """ William B. Turrill """ for Tropical Africa John Hutchinson """ for India William G. Craib, M.A. Botanical Artist Miss Matilda Smith Lecturer (Physics & Chemistry) Paul Haas, D.Sc. """ (Soils and Manures) H. B. Hutchinson, Ph.D. Sub-Assistant Miss Ada F. Fitch "Arthur Garnett	1891 1893 1884 1879† 1892† 1899 1904 1910 1914 1909 1878 1909 1914 1892 1903†
"	1913
Francia Roulton	1912 1913
Mics Enid Mary Iosson	1914
,, ,, ,,	1904
	1879
1	1895†
,, , *William Dallimore	1891†
Preparer George Badderly	1880 1913
Curator of the Gardens *William Watson, A.L.S	1879
Assistant Curator *William Jackson Bean	1883†
Clerk of the Works G. D. Patterson 1	1911

[†] Entered as a young gardener.

Foremen:—		
Herbaceous Department	*Walter Irving	1890†
Arboretum	*Arthur Osborn	1899†
Tropical Department	*Charles P. Raffill	1898†
Decorative Department	*John Coutts	1896†
Temperate House	*William Taylor	1902†
Storekeeper	*George Dear	1884
Sergeant-Constable	Charles George Norris	1896
Packer	H. W. Ruck ,	1907
-		

Medical Officer *L. C. Burrell, M.B., M.A., B.C. .. 1899

Of the above list Messrs. C. P. Raffill and H. W. Ruck are absent from Kew on duty with His Majesty's Forces, but as we hope to welcome them back to Kew before the close of 1915, it does not seem desirable to remove their names.

SUB-FOREMEN.

Name.	Department.	Entered Kew.	Previous Situation.
Baker, A. F	Arboretum	Oct. 1912 J.	Veitch & Sons, Ltd.,
			Kingston Hill.
Beswick, J. C	Temperate House	Sept. 1912. F	ota, Co. Cork.
Clark, J. W	Decorative (Indoor)	Jan. 1913 T	orre Abbey, Torquay.
Coombes, G	Herbaceous	Sept. 1913 N	uneham Park, Oxford.
*Ellis, J	Decorative(Outdoor	July 1911 D	obbie & Co., Edinburgh.
Farries, G	Temp. Ho. Pits	Feb. 1913 J.	Veitch & Sons, Ltd.,
			Feltham.
Harcourt, F. G	Ferneries	Feb. 1913 F	lexford House, Guildford.
‡Meads, A. J	Palm House	Mar. 1912 H	illbrook Place, Iver
			Heath.
†Miles, S. H	Orchids	Jan. 1913 J.	Veitch & Sons, Ltd.,
			Langley.
Williams, R. O	Propagating Pits	Jan. 1913 J.	Veitch & Sons, Ltd.,
			Feltham.

Joined His Majesty's Forces since December 31.

[†] Entered as a young gardener.

GARDENERS.

Name.	Entered Kew.	Previous Situation.
Arnold, W	June 1909	Trained at Kew.
Beer, A	June 1914,.	Amos Perry, Enfield.
Bennett, F	Dec. 1913	Woolverstone, Ipswich.
Bintner, J	Nov. 1913	Farm Nursery, Hampton.
Brain, H. J.	Sept. 1914	S. Bide & Sons, Farnham.
Braybon, E. A	Mar. 1913	St. Margaret's, Beckenham.
Bristow, W	Apr. 1909	Trained at Kew.
Brown, C. H	Sept 1914	Court Close, Eckington.
Butler, F. B	June 1913	Penllergaer, Swansea.
Buyssens, P.	Dec. 1914	Horticultural School, Vilvorde.
Chandler, P	Aug. 1914	Hursley Park, Winchester.
Chollet, H. P.	Feb. 1914	Heineke, Bremen.
Flippance, F	Nov. 1913	Box Grove House, Guildford.
Green, H	Dec. 1914	Clibrans, Altrincham.
Hall, F. W	Apr. 1914	Sandhoe, Hexham.
Hazel, C	Jan. 1914	Birmingham B. G.
Hibbins, W. R	May 1913	Hutton Hall, Guisborough.
Jackson, J. K	Aug. 1914	Lytham Hall, Lytham.
Keys, A	May 1913	Oxenford Castle, Ford.
Meili, K	Sept. 1914	Amos Perry, Enfield.
Melles, A. B	May 1914	Cambridge B. G.
Mould, G. B	Mar. 1913	Weycliffe Nurseries, Guildford.
Reardon, J. B	July 1914	Tully Nurseries, Kildare.
Sudell, R	Mar. 1914	Higher Holme Slack, Preston.
Stewart, W. W	Dec. 1913	West Hall Gardens, Oyne.
Timmers, A	Nov. 1913	Bees, Ltd., Sealand.
Wuyts, O. F. V	Sept. 1914	J. Van de Putte, Ghent.
Yuill, E	July 1913	H. B. May & Sons, Ltd., Edmonton.

The above list is this year a short one, due to so many Sub-Foremen and Gardeners having joined His Majesty's Forces for the duration of the war. Their names will be found in the Roll of Honour, but as according to the terms of their enlistment we hope to welcome them back to Kew on the termination of the war, they do not appear in the Directory of Old Kewites. The vacant positions have been temporarily filled by the engagement of married gardeners out of employment.

[‡] Joined His Majesty's Forces since December 31.

OLD KEWITES.

(The names of Life-members are preceded by an asterisk.)

(The names of	J Ligo	memoers	tire preceded by the determining
V	Toft	Kew.	Present Position and Address †.
Name.			
*Abbott, James M		1898	83 High St. South, Rushden, Northants.
Adams, R	April	1903	St. Joseph's Hospital, Burlington Lane,
			Chiswick.
Adamson, John	July	1909	H. G., Pen Moel, Chepstow.
Aggett, Walter II	June	1888	Supt., Public Gdns., Bermondsey, S.E.
*Allard, Edgar		1899	John Innes Hort. Inst., Merton, Surrey.
*Allen, C. E. F		1904	Curator & Economic Botanist, Port
Anten, C. E. T	100.	1001	Darwin, N. Territory, Australia.
111 T 1'	Man	1011	York Lodge, Upper Parkstone, Dorset.
Allen, Justin	-	1911	
*Allt, W. S		1911	20 East Bowery St., Newport, R.I., U.S.A.
*Anderson, J		1905	c/o Bank of British W. Africa, Accra.
*Anderson, J. W	June	1910	Asst. Curator, Botanic Garden, Singapore.
Archer, Sydney	Mar.	1895	Orkney Cottage, Taplow, Bucks.
*Arden, Stanley, F.L.S	June	1900	27 Churchill Rd., Boscombe.
*Armbrecht, Otto		1898	Derneburg, Prov. Hanover, Germany.
Armstrong, James		1893	H.G., The Moorings, Marion, Mass., U.S.A.
	Oct.	1897	170 Bartlett Av., Toronto, Ontario, Canada.
*Armstrong, Robert		1894	Priorswood, Raheny, Co. Dublin.
*Arnold, George			
*Arthur, Alec		1899	The Homestead, Genesco, N.Y.
Ashlee, T. R		1910	Kerrisdale P.O., British Columbia.
*Ashton, Frank W		1885	116 Hewitt Road, Harringay, N.
Astley, James		1898.	
Attenborough, F	Feb.	1896	H.G., Annesley Ho., Villa Rd., Nottingham.
*Aubrey, A. E	April	1910	2 Raby Terrace, Neston, Chester.
Augull, Karl	July	1902	Maj Nursery, Nowotscherkask, Russia.
*Auton, William J		1897	H. G., Pyrford Court, Woking.
Avins, Charles W	Oct.	1894.	
zivino, charico III.			
*Padwarr P	A 110	1906	Supt., Taj & Govt. Gardens, Agra, India.
*Badgery, R	Dec.	1900.	Birchden, Groombridge, Sussex.
Baggesen, Niels			
Baggs, A. E	Apr.	1911	3605 Knight Rd., Vancouver, B.C., Canada.
Bailey, Thomas		1892	Ravenscourt Park, W.
Baker, G. A	Jan.	1911	9 Beverley Road, Chiswick, W.
Baker, James		1876	H.G., Begbrook House, Frenchay, Bristol.
Baker, John Gilbert,	Jan.	1899	3 Cumberland Road, Kew.
F.R.S., F.L.S., V.M.H.			
Baker, William G	Dec.	1887	Curator, Bot. Gardens, Oxford.
Bale, J. H	Mar.		Carnbrae, Abbotsham, near Bideford.
*Ball, C. F		1903	Asst., Royal B. Gdns., Glasnevin, Dublin,
	Oct.	1908	W. A. Rubber Plantations, Ltd., Asiakwa-
*Band, R	000.	1000	Bu-rimsu, Kibbi, via Accra, Gold Coast.
D 1 C II	Mon	1006	
Banks, G. H		1906	F., Botanic Gardens, Cambridge.
*Barker, Michael		1884	Sec., "American Florist" Co., Chicago.
Barnes, Richard		1871.	II I I N O N N N N I I
Barnett, M. J		1 1914	Kahanui, N. Otago, N. Zealand.
*Bartlett, A. C	May	1898	Landscape Gardener, 52 Forest Road,
			Kew.
Barton, Robert	June	1890.	
Bass, Edward		1899	The Gardens, Sunnylands, Dallington,
2000)			Northampton.
Bass, Thomas	Mar.	1899	
*Bates, G	Feb.	1891.	c/o Messrs. Cutbush, Nurserymen High-
Batters, Frederick H	ren.	1001.	
D T - 1	T1.	1000	gate, N.
Baum, Jacob	July		
*Baumann, Ludwig			1366 Lucretia Ave., St. Louis, Mo., U.S.A.
Baumgardt, Hilding	Mar.		35131
Beale, J. H		1911	
Beatty, E. J	T		Messrs. Wallace & Co., Colchester.
Beck, Joseph		1870	
*Behnick, A	T)		
Dominion, 11.			Germany.
			J.

[†] Abbreviations: H. G.=Head Gardener; F.=Foreman; N.=Nurseryman; M.G.=Market Gardener.