## MISS MATILDA SMITH.

THE lady, President-elect of the Guild, whose portrait occupies the opposite page, will be a familiar figure in the memories of numerous Kewites; and the productions of her skilful and prolific pencil are known and appreciated wherever botany is studied and horticulture practised. Yet few members of our Guild, we imagine, have any idea of the extent and variety of Miss Smith's contributions to pictorial botany. How she became a Botanical Artist may be told in a few words. In 1878 Sir Joseph Hooker was endeavouring to find an artist for the Botanical Magazine and other Kew publications, to succeed the late Mr. W. H. Fitch, and, knowing that his cousin Miss Smith was fond of drawing flowers, though possessing no knowledge of botany, arrangements were at once made that she should practise botanical drawing under Sir Joseph's tuition. She soon acquired considerable skill, and the now familiar "M.S." first appeared on Plate 6386 of the Botanical Magazine, for which she has since executed drawings for some 2300 plates. In 1881 Miss Smith was installed sole artist and lithographer for Hooker's Icones Plantarum, beginning with Plate 1354. Mr. G. Bentham, under whose auspices this publication was appearing, made a provision in his will for its continuation, with Miss Smith as artist, so long as she was able and chose to act. She is still active on this work, which has now reached her 3075th plate. The excellence of these drawings with very full floral analyses is generally acknowledged, and they present a permanent record of Miss Smith's skill in re-animating dried, flattened specimens, often of an imperfect character. Another important branch of Miss Smith's strictly Kew work is the drawing of new and interesting plants which flower in the Gardens; and, although she has not been a copious contributor to purely horticultural publications, she can claim to have produced coloured drawings, from a variety of sources, of more living species than any contemporary artist. Another most useful work is making facsimile copies of plates which are missing in any of the illustrated works in the Library, so that the book is rendered practically complete. The restricted space allowed for this memoir renders it impossible to mention, even, the many books illustrated by our Kew Artist. A representative selection would include the Botany of the 'Challenger' Expedition, devoted to remote insular Floras; Balfour's "Flora of Socotra"; Aitchison's "Botany of Afghanistan"; Collett's "Flora Simlensis" (200 admirable pen-and-ink drawings, produced in the text), and Cheeseman's "Illustrations of New Zealand Plants" (251 quarto plates). The last-named appeared in 1915, and the author expresses his appreciation of Miss Smith's drawings by reference to her high-class work in the following words:—"I think that all capable judges will agree with me in saying that the plates contained in these volumes will enhance her already well-earned reputation." Other examples of Miss Smith's artistic work exist in the publications of nearly all the leading Botanical Societies of the Empire and of some foreign countries; in all the leading herbaria of the world, in the form of drawings of types of species; in various educational and economic essays including Watt's "Cotton Plants" and Johnston's book on Liberia.

In 1898 the Board of Agriculture agreed to pay for a botanical artist for two days a week; Miss Smith was chosen to fill this post, which she still holds. Botanical artists receive few distinctions and often little recognition, but the pictures are there. Miss Smith's association with Sir Joseph Hooker remained a very close one until his death in December 1911, and she was much gratified by being allowed to contribute the designs of the five plants represented on his Memorial

Tablet in Kew Church.

Our President-elect is keenly interested in the Guild and is a liberal supporter of the Benevolent Fund. W. B. H.

#### ANNUAL REPORT.

(1914-1915.)

THE COMMITTEE have pleasure in presenting the Report for the year ending April 30, 1915.

As will be seen by the Capital Account, the balance of Assets has decreased from £47 12s. 4d. to £36 18s. 5d. This is largely due to the extra cost of the Journal, but this would have been more than covered if Members paid their Annual Subscriptions regularly. The Committee regret having to call the attention of Members to the fact that, when the 1915 Journal was posted to Members, over 200 copies of the 1914 issue had not been paid for.

Since the last Annual Report, 11 Life Subscriptions have been paid, making a total of 327.

The Annual General Meeting was held at the Holborn Restaurant on May 23, 1914, the President, Mr. William Goldring, occupying the Chair. The Meeting was followed by a Dinner, when Mr. Arthur W. Hill presided over a company of 98 Members and 5 Guests.

The Committee recommend that in the existing state of affairs, owing to the War, the present Office Bearers and Committee continue in office for another year. Mr. J. H. Holland has been nominated to fill a vacancy on the Committee among the present Kewites. During the absence of Mr. H. Cowley with His Majesty's Forces, Mr. A. Osborn is acting as Secretary.

The Committee regret to have to report the deaths of Messrs. Giles Brewer, Thomas W. Dell, and William Granger since the publication of the *Journal*. Mr. Granger was well known to very many Old Kewites, and a great friend to not a few.

The Great War has overshadowed everything during the past nine months. So far as it has been possible to ascertain at present, 60 of our British Members have responded to the call of their King and Country, and joined some branch of His Majesty's Forces. In addition to the 46 names published in the Journal, the following have also enlisted:—Messrs. A. F. Baker, J. C. Beswick, F. B. Butler, A. E. Duley, G. Farries, C. Hazel, A. Keys, A. J. Meads, S. H. Miles, P. V. Osborne, J. Richardson, H. Sanders, F. J. Stayner, and C. B. Ussher. How many of our Continental Members are serving with the Forces of their respective countries it is quite impossible to say.

The Committee have recently heard with pleasure that our President, M. Louis Gentil, is well and at his post in Brussels. They much regret his inability to preside at the Annual Dinner of 1915.

The appeal made on behalf of Mr. William Crisp has resulted in the receipt of £81 17s. 5d., which the Committee feel is very satisfactory, and they therefore make no further appeal at present, but would draw the attention of Members to the General Benevolent Fund. A grant of £5 from this Fund has recently been made by the Committee to Mr. Hugh Price, who, since August 1912, has been confined to his bed with creeping paralysis, and is quite without support for himself and wife.

The Committee suggest that when the funds permit, Annual Subscriptions of £1 1s. to the Gardeners' Royal Benevolent Institution and 10s. to the Royal Gardeners' Orphan Fund be paid.

#### Balance Sheet, 1914-1915.

Receipts.         £ s. d.         Balance from 1913–14	Expenditure.  £ s. d.  Journal Printing A/c
--	---

# Capital Account.

Liabilities.	Assets.	
$\pounds$ s. d	£ s	. d.
Thomson Bequest	$\frac{*£300 \text{ New South Wales}}{3\frac{1}{2}^{0}/_{0} \text{ Stock } \dots}$ 300	0 0
the two-thirds rate as per Rule 7	Deposits in Post Office Savings Bank	0 0
Balance of Assets 36 18 5	Cash in hand with Treasurer 0	6 11
£347 6 11	£347	6 11

<sup>\*</sup> New South Wales  $3\frac{1}{2}$ % Stock is redeemable at par, but now stands at 92% = £276, and was purchased at £315.

# Benevolent Fund.

Receipts.				Expenditure.
	£	s.	d.	£ s. d
Balance from 1913-1914	5	19	1	Grant to Mr. Hugh Price 5 0
Subscriptions	6	7	0	Postage and Receipts 0 0 8
				Balance in Post Office Savings Bank
Į.	12	6	1	£12 6

# The William Crisp Fund.

Receipts. $\pounds$ s. d.	Expenditure. $\pounds$ s. d.
Grant from Benevolent Fund       1 9 6         Donations       81 17 5	Paid to Mr. Crisp
	Stationery, Stamps, and Addressing Envelopes 1 12 6  Postage and Receipts 0 6 0  Balance in Post Office 6 4 11
<u>£83 6 11</u>	Savings Bank

#### Dinner Account.

£21 7 11		£21	7	11
	Postage, 'Phone, Fares	0	5	6
	Printing	1	1	5
Funds	Head Waiter	0	10	6
To Balance from Guild \ 0 8 11	Pianist	0	10	6
22 Subscriptions at 3s. 6d 3 17 0	Freight on Decorations	0	16	0
76 Subscriptions at 4s. 6d 17 2 0	104 Dinners at 3s. 6a	18	4	0
$\pounds$ s. d.		£	s.	d.
Receipts.	Expenditure.			

Compared with Vouchers, Bank-book, Stock Receipt, etc., and found correct,

J. Coutts, Treasurer. A. Osborn, Secretary.  $\left. \begin{array}{l} \text{W. Dallimore,} \\ \text{E. J. Allard,} \end{array} \right\} \textit{Auditors.}$ 

May 6th, 1915.

#### ANNUAL GENERAL MEETING.

THE Annual General Meeting of the Guild was held at the Holborn Restaurant on Wednesday, May 19, 1915. In the absence of the President, Mr. W. Jackson Bean, Mr. J. Weathers proposed Mr. C. H. Curtis as Chairman, this was seconded by Mr. J. Christie.

Being printed and circulated in the *Journal*, it was not thought necessary to read the Minutes of the last Annual General Meeting. A motion to pass them as read was proposed by Mr. F. W. HARVEY and seconded by the CHAIRMAN and carried.

The Annual Report and Balance Sheet were read by the Secretary, Mr. A. Osborn. These recorded a satisfactory state of affairs, and their adoption was moved by the Chairman and seconded by Mr. J. Weathers and carried.

Commenting on the Report, the Chairman thought it desirable, owing to the War, to retain the present Committee and Office Bearers for another year, with the exception of the President.

Referring to the death of Mr. William Granger, the Chairman said he was a great friend to many Old Kewites, and he felt sure the advice given to, and kindly interest taken in, the young men during Mr. Granger's time at Kew had considerably influenced their future. He regretted the inability of their President, M. Louis Gentil, to be with them. The value of the Benevolent Fund was shown by their being able to assist, with a grant of £5, an Old Kewite, Mr. Hugh Price, who was stricken with paralysis. In seconding the adoption of the Report, Mr. Weathers thought it a good idea for the Committee to continue in office another year. He feelingly referred to the death of Mr. Granger, and said in him many Old Kewites had found a genial and kind-hearted friend.

Mr. F. W. Harvey drew attention to the good work the Gardeners' Royal Benevolent Institution and the Royal Gardeners' Orphan Fund were doing. He thought the Guild should become Annual Subscribers to both, and individual members should help all they could. The Gardeners' Royal Benevolent Institution had recently made a grant of £5 to a destitute member of the Guild.

Though perhaps not a usual proceeding at the Annual Meeting, Mr. Weathers thought those present would agree with him that the Committee and Officers were deserving of a very hearty vote of thanks. He knew something of the work they had to do in the course of a year, and the Annual Report they had just heard read showed their desire to assist in the continued prosperity of the Kew Guild. This was seconded by Mr. J. Christie.

A vote of thanks to the Chairman, Mr. C. H. Curtis, proposed by Mr. A. C. Bartlett and seconded by Mr. J. Weathers, brought the Meeting to a close. Those present then adjourned to the dining hall.

#### THE DINNER.

Before deciding to hold this annual function the Committee gave the subject careful consideration, the ultimate decision being that a quiet informal affair would meet the wishes of most Guild Members who would meet together for the Annual General Meeting, while the Chelsea Show would bring some provincial members to London.

In the unavoidable absence of the President, M. Louis Gentil, the Committee invited a fellow-countryman, M. Val. Bouckenooghe, to preside. A letter regretting inability to be present was read from Mr. J. C. Newsham, and telegrams from Quarter-Master-Sgt. Raffill and Mr. C. Harding.

The loyal toast having been duly honoured, the CHAIRMAN proposed the toast of His Majesty's Forces. The speaker, in excellent English, said that never in the history of the British Isles-or, in fact, of the world—was it so necessary for the British Empire loyally to support the Army and the Navy. Kewites were trying to do their share, as they had heard in the Annual Report, and he was pleased to see the now familiar khaki represented in the room. Though quite unable to mention all, he might be permitted to mention a few from whom they had recently heard: "Our Secretary," Rifleman H. Cowley (cheers), in hospital at Oxford, wounded in the knee; Pte. Corbett, in a French hospital, wounded; Lieut. W. B. Little, Captain Chipp, and Bombardier Tindall in France; Messrs. Marriott and Stayner from South Africa, in German South-West Africa with General Botha; and they had just received a letter from Mr. C. E. F. Allen, Curator and Economic Botanist, Port Darwin, saying he had joined the Australian Northern Territory contingent, training at Brisbane. The speaker spoke in high terms of the gallant British Army at Ypres. He related how he was able to billet the whole of the Yorkshire Regiment in one of his vineries; but now, alas! constant shelling by the German guns has reduced his once-thriving nursery to a heap of ruins. He had much pleasure in coupling with the toast the name of Sergt. R. Kett, of the Queen's Westminsters, whom they were pleased to see that evening, and who, as some present were aware, had been badly wounded in the head with shrapnel at Armentières,

In responding to the toast, Sergt. Kett said he was quite unprepared for such an important duty. In times of peace Kewites followed a quiet and not very eventful calling, but when necessity arose it was gratifying to find so many members of the Guild responding to the call of their King and Country.

The Chairman next proposed the toast of "The Kew Guild—May it continue to prosper!" They were a rather smaller company than usual that evening, but they, nevertheless, were able to fulfil one of the objects of the Guild, namely to bring together those who had worked at Kew and renew old friendships. With the toast of the Guild he coupled the name of Mr. C. H. Curtis, a fellow-worker with him at Kew in 1891 and 1892.

Replying to the toast, Mr. Curtis said how pleased they were to see M. Bouckenooghe there that evening, after the troublous times he and his family had experienced at Ypres. Mr. Curtis spoke of the Guild as a brotherhood, and, glancing across at the ladies present, added "sisterhood also." They all had a great affection for Kew and those with whom they had worked. He referred to the value of the Guild Dinner, which, in his own case, had enabled him, after twenty years, to meet again Mr. Ernest Hemming, the Editor of The National Nurseryman, from the United States. In travelling about the country he felt sure of a warm welcome wherever he met a Kew man. Several Kew men had recently been appointed to important positions, and he referred to Mr. William Pettigrew, from Cardiff, who had now taken charge of the Manchester parks.

A motion by Mr. A. C. Bartlett that the Meeting should send its greetings and good wishes for his speedy recovery to their Secretary, Mr. Herbert Cowley, in hospital at Oxford, was carried with enthusiasm and musical honours. In reply, Mr. F. W. Harvey said he would convey their good wishes to Mr. Cowley. He had seen him a few days previously, and they would be pleased to know he was progressing favourably.

In a graceful speech, Miss G. COPE proposed the health of "The Chairman." Speaking on behalf of the ladies, she might say they had a sisterly feeling for the Guild, and looked on Kew and those with whom they worked with similar feelings to those expressed by Mr. Curtis.

Shorn of the usual songs, there was a much better opportunity for those present to move about on this occasion and renew old friendships and make new ones—in fact, it was generally agreed by those present that the function, though not so large as usual, was one of the most enjoyable held by the Guild.

The following were present:—

M. Val. Bouckenoogh (Chairman).	e
R. Pinches (Guest).	
R. B. Kerr (Guest). Allard, E. J.	
Anderson, C. H. Baker, A. F.	
Bartlett, A. C. Bates, G.	
Bennett, F. Beswick, J. C.	
Biggs, E. M. Bintner, J.	
Buyssens, P. Christie, J.	
Coombes, G.	

Cope, Miss G.
Coutts, J.
Cundy, C.
Curtis, C. H.
Dawe, M. T.
Farries, G.
Foden, W.
Glover, F.
Godseff, L. G.
Gunnell, Miss E. M.
Harcourt, F. G.
Harvey, F. W.
Hibbins, W. R.
Horton, E.
Hutchinson, J.
,

Jannings W I
Jennings, W. J.
Kett, R.
Lavender, W. L.
Longmire, F. J.
Meili, K.
Oliver, G. H.
Osborn, A.
Page, W.
Powell, Miss E. M.
Scott, M. B.
Spooner, H.
Stewart, W. W.
Taylor, W.
Weathers, J.
Wuyts, O. F. V.
5 2 2

#### THE MUTUAL IMPROVEMENT SOCIETY.

#### Session 1914-15.

As was to be expected, the War interfered considerably with the work of this most valuable Kew Institution. The programme arranged previous to the opening of the Session had to be varied from time to time, owing to several of the readers of papers leaving to join His Majesty's Forces, before the date arranged for their subject.

The average attendance at the meetings was 28; this is much lower than last year, but must be considered good in view of the depleted staff. The largest meeting was on March 15, when 50 members and visitors were present, the subject for the evening being "A Trip through British Malaya," by Mr. J. W. Campbell, illustrated by 90 coloured lantern-slides. This was generally agreed by those present to be one of the most interesting and instructive lectures given before the Society, and the wish was expressed that other Old Kewites when home on leave would favour the Society with their experiences.

The Hooker Prize, given by the Director, was awarded to R. Sudell.

1914.	Syllabus.	
Oct. 5.	The Peoples of the North Sea Littoral.	SirDavidPrain, F.R.S.
,, 12.	Vine Culture	A. C. Johnson.
,, 19.	Alpines in Ireland	J. B. Reardon.
,, 26.	Acanthaceæ	W. Taylor.
Nov. 2.	Forestry Notes	W. Dallimore.
,, 9,	Ferns	H. J. Brain.
,, 16.	Process of Nitrification	A. J. Little.
,, 23.	The Education of a Gardener	W. R. Hibbins.
,, 30.	Sweet Peas	W. W. Stewart.
Dec. 7.	Spartina Townsendii (Lantern)	Dr. O. Stapf, F.R.S.
,, 14.	Soils and Manures	F. G. Harcourt.
,, 21.	Spring Bedding	J. Coutts.
1915.	8	
Jan. 4.	A Holiday in Switzerland (Lantern).	A. D. Cotton, F.L.S.
,, 11.	Plant Diseases (Lantern)	G. Massee, F.L.S.
,, 18.	Orchids in Belgium	H. P. Chollet.
,, 25.	The Cross-Pollination of Fruit Trees.	A. B. Melles.
Feb. 1.	${\bf New  Chinese  Trees  and  Shrubs} ({\it Lantern})$	
,, 8.	Bacteriology	G. Coombes.
,, 15.	Insectivorous Plants	F. Flippance.
,,. 22.	Liliums (Lantern)	A. Osborn.
Mar. 1.	Gesneraceæ	R. O. Williams.
,, 8.	Orchids at Home and Abroad	R. A. Rolfe, A.L.S.
,, 15.	A Trip through British Malaya	
	(Lantern)	J. W. Campbell, J.P.
,, 22.	A Commercial Trained Fruit Garden	J. Bintner.
,, 29.	Secretary's Report.	
	Chair	man, J. Coutts.

Hon. Secretary, R. Sudell.

#### THE LECTURES, 1914 and 1915.

Systematic and Geographical Botany. Lecturer, Mr. C. H. Wright, A.L.S.

13 certificates. Highest number of marks: C. Hazel, 179; F. Flippance, 178; L. R. Bennett, 172. Maximum 200.

General Botany. Lecturer, Mr. A. D. Cotton, F.L.S.

13 certificates. Highest number of marks: C. Hazel and F. W. Hall, 242. Maximum 250.

Soils and Manures. Lecturer, Mr. H. B. Hutchinson, Ph.D.

18 certificates. Highest number of marks: J. Bintner, 91; W. Clark, F. Flippance, and W. R. Hibbins, 89. Maximum 100.

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

6 certificates. Highest number of marks: F. Flippance and J. B. Reardon, 250; F. R. Bennett and J. Bintner, 249. Maximum 250.

Plant Pathology, 1914. Lecturer, M. G. Massee, F.L.S.

17 certificates. Highest number of marks: J. Bintner, 148; A. F. Baker and A. Keys, 147. Maximum 150.

Plant Pathology, 1915. Lecturer, Mr. W. B. Brierley, M.Sc.

11 certificates. Highest number of marks: A. Beer, 205; H. P. Chollet, 198. Maximum 250.

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

13 certificates. Highest number of marks: W. F. Godfrey, 94; P. Chandler, 93. Maximum 100.

#### DEMONSTRATIONS AMONG LIVING PLANTS.

Twenty lectures among the living collections were given during the summer by Messrs. A. D. Cotton (Rock and Water Garden, etc.), W. Dallimore (Arboretum), S. A. Skan (Herbaceous Ground), and C. H. Wright (Indoor Plants).

British Botany Club.

1914 (Secretary, J. C. Beswick):—18 certificates were granted for collections.

Worthy of special notice: A. Bailey, A. Braybon, C. Hazel, and W. R. Hibbins.

#### APPOINTMENTS.

#### Home.

G. H. Banks, F., Botanic Gardens, Glasgow.

F. R. Bennett, F., Aldermaston Court Gardens, Reading.

J. W. Besant, Editor, Irish Gardening.

W. D. Besant, H. G., Ardtornish Towers, Ayrshire.

P. Bolt, jun., H. G., Stand Hall, Whitefield, Manchester.

H. Cowley, Editor, The Garden.

H. W. Epps, F., Barcombe Nursery, Sussex.

R. C. Gaut, M.Sc., Agricultural Adviser, Worcestershire C.C.

- G. F. Gardiner, Horticultural Instructor, Bristol University.
- A. Holden, F., Botanic Garden, Cambridge.
- M. McNeill, H. G., Kiloran, Isle of Colonsay, Argyllshire.
- A. A. Pettigrew, Superintendent of Parks, etc., Cardiff.
- F. J. Philp, Superintendent, Golder's Hill Park, L.C.C.
- J. Rourke, Assistant-Superintendent of Parks, Glasgow.
- J. T. Smith, H. G., Caldecote Towers, Bushey, Herts.

#### Indian and Colonial.

- J. R. Anderson, Manager, Bai Plantations, Cameroons, W. Africa.
- M. T. Dawe, F.L.S., Agricultural Adviser, Government of Colombia.
- L. W. Gardner, Estate Manager, N. Charterland Exploration Co. (1910), Ltd., Rhodesia.
- T. Hunter, Senior Curator, Gold Coast.
- G. B. Mould, Royal Botanic Garden, Sibpur, Calcutta.
- R. O. Williams, Curator, Royal Botanic Gardens, Trinidad.

# Foreign.

E. Moe, Curator, Botanic Garden, Christiania.

#### WEDDING BELLS.

	WEDDING DE	LLS.
Mr. A. Bogemans	to Miss Yolande Vanhove	at Hayti. Aug. 29, 1915.
Mr. A. D. Cotton	" MissEnid M. Jesson	" Bedford Park. Dec. 30, 1915.
Mr. H. Cowley	" Miss Elsie M. Hurst	"Kingston-on- Dec. 8, 1915.
		Thames.
Mr. W. Dunk	" Miss S. G. Hames	" Kew. Jan. 15, 1916.
Mr. J. Ellis	" Miss Emma Dear	" Richmond. Feb. 4, 1915.
Mr. J. Jarrett	" Miss M. P. Clarence	"Birmingham. June 5, 1915.
Mr. R. S. Lynch	" Miss Bessie A. Brooker	, Cambridge. Sept. 13, 1915.
Mr. H. Sanders	" Miss Winifred Burges	" Evershote, June 13, 1915.
		Beds.
Mr. R. O. William	s ,, Miss A. Birkinshaw	" Little Bredy, Jan. 11, 1916.
		Dorset.

# METEOROLOGICAL NOTES.

	Rainfall in inches.	Temperature.			
		Maximum.	Minimum		
1915.					
January	4.09	52° F.	28° F.		
February	3.07	52	23		
March	·81	58	23		
April	1.18	72	26		
May	3.38	76	34		
June	•59	85	37		
July	4.07	82	46		
	3.43	74	42		
August	1.95	76	37		
September	2.17	66	32		
October			19		
November	1.87	52			
December	4.97	55	27		
Total rainfall for 1915	31.58		_		

#### KEW NOTES.

According to the official figures, the attendance of the public in 1915 was 4,300,330, an increase of 218,319 over last year's total. The greatest monthly attendance was during May, the figures being 1,031,802, which included the highest single-day record for the year, Whit-Monday, May 24th, 175,830. January 22nd, with 97 visitors, was the lowest number recorded for one day, while the least popular month was December, with an attendance of 33,068.

THE decision of the Board of Agriculture and Fisheries, acting on the advice of the Retrenchment Committee and supported by the Treasury, to charge a fee for admission to the Gardens on and after January 17, 1916, will be known already to most Kewites. authorised scale of charges is as follows:—On Mondays, Wednesdays, Thursdays, Saturdays, Sundays, and Good Friday, 1d.; on Tuesdays and Fridays, except Good Friday (Students' Days), 6d.; a charge of 3d. is made for the admission of photographic apparatus. Bath-chairs will be permitted to enter the Gardens during public hours when the condition of the paths is suitable, on payment of 1s. on Students' Days (as above) and 6d. on other days. Students' permits, available till the close of the calendar year and obtainable on written application to the Director by bona fide students and artists, will be issued on payment of a fee of 5s. These permits will cover free entrance on Students' Days and before public hours on week days except on Good Friday and Bank Holidays. Season tickets, available till the close of the calendar year, can be obtained on written application to the Director on payment of a fee of £1. These tickets will cover admission on any day during public hours.

By the retirement of Mr. George Massee on March 31st, under the age limit. the Herbarium loses one of the best-known and most active members of its Staff. Mr. Massee joined the Kew Staff in 1893, when he was appointed Principal Assistant (Cryptogams), succeeding the late Dr. M. C. Cooke in charge of the department. With regard to his literary labours, he knows well what it is to burn the midnight oil, feeling, he always says, in his best mood for writing when everyone else has retired. One is perhaps most impressed with his extraordinarily wide knowledge of Fungi, and his intuition in detecting an awkward and deceptive specimen, though one is continually struck afresh with the excellence of his bold and beautiful drawings. Mr. Massee has a keen sense of humour, and to be in his company or listen to his lectures relieves what many would regard as a dry subject of all its dullness. For many years, as the Journal records show, Mr. Massee favoured the Mutual Improvement Society with an annual lecture, the

attendance at which was sufficient evidence of the educational value attached to them. The scathing denunciations sometimes indulged in, both at a lecture and in personal conversation, are not meant to be taken seriously, and those who know him well welcome his candid and often pungent criticism. He will be much missed at Kew by all. In his new home at Sevenoaks, Mr. Massee takes with him the good wishes of the members of the Kew Guild for long-continued health and happiness. As President in 1907, Mr. Massee's portrait appeared as the Frontispiece to the Journal for 1908.

Mr. W. G. Craib, M.A., Assistant for India in the Herbarium, has been appointed Assistant to the Professor of Botany in the University of Edinburgh. Mr. J. Hutchinson, Assistant for Tropical Africa, succeeds Mr. Craib as Assistant for India. The duties of Assistant for Tropical Africa are, as a provisional measure, being performed conjointly by Miss M. L. Green, B.A., and Mr. F. Flippance.

About a year ago the British Columbia Government, at the suggestion of their Agent-General in London, offered a larger pole to replace the old flagstaff, which had shortly before been condemned and taken down. The new pole was logged from the lower mainland coast of British Columbia. Its weight is about 18 tons, and it now measures 215 feet in length, 33 inches in diameter at the large end, and 12 inches in diameter at the small end. This monster Douglas Fir, once the pride of a British Columbian forest, must have been at least 300 feet in height when it was felled. Hauled on a logging railway a distance of ten miles to salt water, the pole was taken by a tug to Vancouver and loaded in August 1915 on the Royal Mail Steam Packet Company's steamer 'Merionethshire.' It arrived in the London Docks at the end of December, and the spar was then discharged into the Thames. Without even grazing a bridge, the giant pole was safely towed up the river by the tug 'Tigress' on January 3rd. It lies in the river, at the time of writing, near the Isleworth Gate, after a hazardous but comparatively uneventful journey lasting about six months. Though within half a mile of its appointed position, the task of rolling the pole over the lawns and hoisting it into position is not an easy undertaking.

REFERENCE has been made in the last two Journals to the establishment of a Pathological Laboratory. The two cottages known as Gumley and Chestnut Cottages have been fitted up for research work. A considerable amount of the pathological work connected with the Board of Agriculture has been carried out in the past in the Jodrell Laboratory. Owing to the increasing importance of the work, it has been deemed necessary to establish a separate department with its own staff of Plant Pathologists. This at present consists of two First

Class Assistants, a Temporary Technical Assistant, and a Preparer. A Second Class Assistant is also to be appointed. Four acres of land on the north side of the Mortlake Road, near the railway-bridge spanning the river, have been purchased for experimental work.

For the present the Board's Entomologist is accommodated in the laboratory, so that opportunity is also afforded for the investigation of plant-diseases caused by insects.

The cottages now united were originally in connection, and were used, it is believed, as residences for ladies of the bedchamber when Queen Charlotte occupied Kew Palace.

THE Cricket, Football, and Swimming Clubs and the Annual Social are in abeyance for the duration of the War.

TWENTY-FOUR women-gardeners are employed temporarily in the Gardens, their principal spheres of work being in the Herbaceous Ground, Rock Garden, Flower Garden, and Greenhouse.

Officers of the Navy have soon solved the difficulty of obtaining admission to the Gardens without payment. On February 1, a sixpenny day, the Royal Naval Air Balloon "Swallow," containing six officers, landed safely on the sun-dial lawn. Their descent was due to calmweather conditions. The balloon had been in the air for two hours, but had only travelled the short distance from Hurlingham. To deflate the envelope and pack everything up took only about half an hour. A motor-lorry was soon in attendance to convey it back to the starting-point.

On somewhat similar lines to last year, a tea and entertainment were given in the Christ Church Hall, on January 19, to the wives, children, and mothers of those men employed in the Gardens who are absent from home serving in His Majesty's Forces. The arrangements were made by the Assistant Director and a committee selected from the lady members of the Staff and wives of the officials. With the exception of the conjurer and ventriloquist, the whole of the work in connection with the tea and the entertainment was carried out by members of the Staff and their families. Fifty-eight adults and one hundred and twenty-nine children were present.

#### GLEANINGS.

The Committee desire to impress upon all Members the necessity of their co-operation in keeping the Directory up to date. The list of members and their addresses at the end of the *Journal* is one of the Guild's most useful possessions, but its value may be considerably curtailed unless the Secretary is kept informed of members' movements.

It is interesting to hear from a Kewite in the United States that a suggestion has been made to have a gathering of O. K.'s there at one of the big spring flower-shows.

The West India Committee Circular for July 13, 1915, publishes the news that "Mr. Joseph Jones, Curator of the Botanic Garden, Dominica, has been appointed temporarily to an official seat on the Legislative Council. A better man could not be found." Kewites in general, and the Hon. Joseph Jones's friends in particular, will be delighted to hear of this distinguished honour.

On October 19 Mr. E. H. Wilson lectured to the Gardeners' and Florists' Club of Boston. U.S.A., on his expedition to Japan. The lecture was illustrated by a series of coloured lantern-slides. Among the audience were three Old Kewites—Messrs. R. Cameron (Harvard), T. D. Hatfield (Wellesley), and W. H. Judd (Arnold Arboretum).

Mr. Daniel Yeoward, Curator of Suva Botanic Gardens, Fiji, retired on a pension on June 25, 1915. He left Kew in August 1889.

Mr. Edward Feltham, for some time with The Wargrave Hardy Plant Farm, Ltd., has started in business on his own account as a Landscape Gardener and Nurseryman, special lines being Alpines and herbaceous plants. He also undertakes the construction of rockgardens and the making and planting of herbaceous borders.

Mr. George Bates has relinquished the post of Head Gardener at Digswell, Herts, and in company with a friend has acquired the Sheering Nurseries, Sawbridgeworth, Herts. They have published an up-to-date list of Perpetual Flowering Carnations, and the houses are well stocked with young plants for sale and benches of plants for the cut-flower trade.

Mr. A. R. Gould, who had charge of the extensive exhibits of Messrs. C. C. Morse & Co. at the San Francisco Exhibition, was awarded the Silver Medal of the Panama-Pacific International Exposition for meritorious services.

OLD KEWITES AT HOME.—The following Members are or have been home. The list is unusually short, but may not be complete:—A. R. Bell (Nigeria), J. W. Campbell (Malacca), B. S. Cavanagh (Gwalior), A. E. Evans (Gold Coast), F. J. Evans (Nigeria), W. J. Goodrich (Cape Town), H. Green (Hong Kong), T. Hunter (Gold Coast), W. H. Johnson (Nigeria), J. E. Leslie (Nagpur), J. D. Snowden (Uganda), H. M. Woolley (Borneo).

It is with very great pleasure we are able to record the award of the Military Cross for distinguished service to Staff-Captain W. B. Little. His name was mentioned in Sir John French's Despatches of January 1. Mr. Little joined the army as a Second Lieutenant soon after the outbreak of the War. His rapid promotion is a noteworthy achievement. A brother, also a Kewite, Mr. C. A. Little, was in New Zealand when war was declared, and joined one of the first local forces raised to assist the Motherland. He was one of the New Zealand contingent that earned undying fame in the Dardanelles operations, and was severely wounded, necessitating his return to New Zealand. Our readers will unite in wishing him a speedy and complete recovery.

From the 'Thames Valley Times,' April 7, 1915.—" By the election of Mr. John Weathers and another to the South Ward, Isleworth has considerably improved the personnel of the District Council. Councillor Weathers, with his wide and lengthy connection with Isleworth and his experience in many walks of public life, will be able to infuse into the debates a tone that has been lacking hitherto so far as the riparian parish is concerned."

## KEWITES AS AUTHORS.

"Planting in Uganda," by Messrs. E. Brown and H. H. Hunter, briefly referred to in the last *Journal*, is proving of more than general interest to planters in tropical countries. Full particulars are published in our advertisement pages.

"Climbing Plants," by Mr. W. Watson, published at 2s. 6d., is one of the Present-Day Gardening Series, issued under the general editorship of Mr. R. Hooper Pearson and published by Messrs. T. C. & E. C. Jack. The book is a valuable addition to the series, and deals with a class of plants which might be made much more use of in our gardens and greenhouses.

From the pen of Mr. H. H. Thomas three books have been published by Messrs. Cassell & Co. during 1915. The most important is "The Book of Hardy Flowers." In it the author deals with perennials, annuals, trees, and shrubs, and, as they are arranged alphabetically, it is quite easy to find information about a particular genus. Though written particularly for the information of amateurs, the volume is full of useful information and helpful to the professional. The price is 12s. 6d. "The Greenhouse, its Flowers and Management," price 1s. 6d., and "Bulb Growing for Amateurs," price 1s. 6d., are two useful handbooks for garden lovers.

In the last issue of the *Journal* a slight error in the title occurred in referring to Mr. H. F. Macmillan's admirable book "Tropical Gardening and Planting," the latter reading "Transplanting," which is obviously incorrect. The same author is now busily engaged in preparing a classified catalogue of plants in the Peradeniya Gardens.

#### IN FAIR KASHMIR.

In the early part of 1914 some friends were making up a party for a trip to Kashmir. Thinking it would be an excellent idea for me to go with them, I applied for two months' leave.

There are three ways into Kashmir from India, but the easiest, and by far the most popular, is that from Rawal Pindi, which is the one we took. As far as Rawal Pindi one travels by train; from there into Kashmir the journey is done by tonga. A tonga is a rough two-wheeled cart with a curved roof, but open at the sides; there is room for one person and the driver in front, and for two people behind. Each person's bedding is also carried, but there is not room for much else.

The road for the first 37 miles rises over 4000 feet to a height of about 6000 feet above sea-level; during the next 28 miles it drops 4000 feet to a place called Kohalla. It was rather interesting to notice the change in the vegetation going up, and the reverse change going down. At the lower levels I noticed Nerium odorum growing near streams, and on the dry hillsides quite a lot of Dodonea viscosa. Higher up there were Pine-forests, and wild Roses in full bloom made brilliant splashes of colour in the landscape. Kohalla for the next 98 miles to Barramulla the road most of the way follows the windings of the Jhelum River. Sometimes it is almost level with the river, at others several hundred feet above it. The road is generally just a narrow ledge cut out along the hillsides, often out of solid rock and sometimes out of moraine. The latter is none too safe, and a heavy storm will generally manage to wash away a bit of the road, necessitating road-mending gangs being continually at work. For over 90 miles to just below Barramulla the Jhelum is a rushing, roaring torrent, probably one of the longest in the world. The scenery, with hills all around and an occasional glimpse of a snow peak in the distance, is very fine, and as the road climbs higher, pineforests add to its beauty. Dhak bungalows or rest-houses are situated along the road, at an average of about 14 miles apart, for the convenience of travellers.

At Barramulla we took to boats. Most visitors to Kashmir live in houseboats or dungas, the latter being a small edition of the houseboat, with mat sides and roof instead of wooden ones. Progress in these is somewhat slow, as they are each towed along by four or five men. Time, however, is no object, and there is much to interest. The Jhelum is now a broad placid stream, with low grassy banks. Willows and Mulberries are plentiful, with here and there a noble Chinar tree (*Platanus orientalis*). Meadows yellow with Buttercups, and Poppies growing in fields of corn, remind one of the homeland. In the distance are Pine-clad slopes, with snow peaks towering above them. As we went farther the Pir Panjal range of mountains came into view—a

magnificent panorama of mountain scenery, apparently rising abruptly from the plain, with numerous peaks covered with eternal snow, and stretching in unbroken line as far as the eye could see. On the way from Barramulla to Srinagar we had to cross the Wular Lake, which is the largest in India. It is half encircled by mountains. Sunrise on the lake is very beautiful—far more so than I can describe. I got up at 5 A.M. to see it, and was not sorry afterwards, which, in my opinion, is quite a good recommendation. A number of aquatic plants grow in the lake. A white water-lily is very common, as are also the Water-Chestnuts, Trapa natans and T. bispinosa. A Polygonum is also very abundant.

Srinagar, the capital of Kashmir, is a very picturesque town from a distance, and even close by to people whose sense of smell is not too acute. The houses are largely built of wood, and most of them appear on the point of falling down. Many of the roofs are covered with soil, in which grasses, and perhaps Irises and other flowers, may be seen The general style of architecture is said somewhat to resemble the Swiss, while the numerous canals through the city give it a faint suggestion of Venice. The river is spanned by seven bridges, made of logs of wood and resting on stone piers. I had occasion to drive across one of them one day in a trap, and the bridge seemed a very bumpy, rickety affair. Arriving on the other side, I found a notice-"This bridge is unsafe for wheeled traffic"! Most of the shops are along the river, which is here about 200 feet wide, and is the main thoroughfare. The charm of the city, however, is spoilt by the squalor and filth of the inhabitants. The Kashmiris are the dirtiest people I have ever seen, and Srinagar is worthy of them. Lots of boys are to be seen every day bathing in the river and canals, but when they become men they appear to be like St. Paul and put away childish things. It is doubtful if some of the people ever have a real bath, and one wonders, if such a misfortune were to befall them, whether, in the process of removing the various layers of dirt, they would come across things they had "loved long since, but lost awhile." One of the main articles of dress is a garment something like a night-They often slip their arms inside the shirt, with very loose sleeves. main part of the garment, leaving the sleeves to hang loose; this enables them to hold next to their body an earthen vessel with wickerwork round it, in which is live charcoal, and so keep themselves warm. I was a little disappointed with the appearance of the Kashmiri women: I had heard so much of their beauty that perhaps I expected I did see several very pretty women, but not nearly so many as I had anticipated, and they were generally so dirty that the pleasing effect of their beauty was spoiled.

Adjoining the native city is the European Quarter, its wide roads, nice bungalows, and general air of cleanliness forming a marked contrast. It is here, on the banks of the Jhelum or the canals, that houseboats are usually tied up until the weather gets too warm, when

most visitors leave their boats and go to the hills. Quite a feature of life in or near Srinagar in the season is the number of itinerant merchants who go about in small boats and visit all the houseboats, endeavouring to sell their wares. Embroidery work in endless variety on all sorts of articles, from bedspreads to doyleys and blouses, jewellery of sorts, carved wood, papier-maché work, genuine and faked old brasswork (mostly the latter), the world-famed Kashmir shawls, picture postcards—in short, anything and everything the merchants think visitors can be beguiled into buying is offered for sale.

About three miles from Srinagar is the Dal Lake. Round about this lake are four or five old Mogul gardens, made about 300 years ago, when the Mogul Empire was at the zenith of its power and the Court came here each year for the hot weather. Two of these gardens are still in fairly good preservation, and are kept up by the Maharajah of Kashmir. The style is far too formal, judged from the modern European standpoint, all the gardens being arbitrarily divided into squares. There are, however, a number of Chinar trees, which have sprung up by chance or have been planted haphazardly, which help to relieve the formality of the original designs. It is, perhaps, open to question, however, whether, in a country of such magnificent natural scenery as Kashmir, a formal garden would not be a greater relief to the eye than one on more natural lines. One of these gardens, Shalimar, built in 1619 by the Emperor Jehangir, consists of four terraces. On the lowest one was the Hall of Public Audience. This portion was occasionally thrown open to the public to allow them a view of the Emperor seated on his black marble throne. The central portion of the garden, consisting of two small terraces, was the Emperor's garden, in the centre of which was the Hall of Private Audience, and the last and highest terrace formed the Zenana garden for the ladies of the Imperial harem. In the centre of this garden the Zenana Palace, with its splendid carved pillars of black marble, is still in a good state of preservation. It is surrounded by water, in which are many fountain-jets, and the general effect when the fountains are playing is very fine. Down the centre of the garden is a water-channel, about 12 or 15 feet wide, with a cascade between each terrace. On both sides of this channel are now nice green lawns and flower-beds, the outer parts of the garden being given over to Apples, Cherries, and other fruit-trees. Climbing Roses have been planted on the retaining walls of the terraces. Some of the finest Maréchal Niels I have ever seen were growing on one of the old pavilions. It is a very charming garden, with a seductive air of quiet and repose about it. The other one, the Nishāt Garden or Garden of Gladness, is somewhat similar in design. I visited several others of the old Mogul gardens, but they are all in more or less advanced stages of decay, and there was nothing to do but admire the taste of those who selected the sites. The old Moguls certainly knew where to make a garden. Many of them are situated at the foot of a mountain, so that, looking up the

gardens, there was always a fine view of Pine-clad slopes, with perhaps a snow peak or two.

When the weather gets warm in Srinagar most people go off to Gulmarg, which is the principal hill-station for Kashmir society. Others who are more active, or who get enough of society at other times, take delightful trips among the mountains. All requirements such as provisions, tents, and bedding have to be taken along on ponies, as nothing can be obtained locally. A friend and I went on one such trip to a place called Sonamarg, or The Golden Meadow, about 50 miles from Srinagar, the road following the course of the Scinde River, another rushing torrent. Sonamarg is a small valley at a height of 9000 feet above sea-level, surrounded by precipitous mountains rising to a height of 16,000 feet. We pitched our camp in a shady wood of Walnuts and Birches, near a sparkling brook fresh from the snows. At the time of our visit parts of the valley were quite golden yellow with Ragwort, which probably accounts for the name of the place. Here and there were blue patches of Forget-menots, and many other flowers were noticeable. In the shelter of the woods were Adiantums and other ferns, Columbines, Pansies, Aquilegias, Primulas, Violets, etc. Indeed, wild flowers of all sorts were very plentiful. The glory of Sonamarg, however, is its Valley of the The view up this ravine over the snow, with pine-covered hills on one side and bold rocky mountains on the other, is said to be one of the finest of its sort in the world. We went some distance up the ravine, over a lot of snow, but had to turn back without having seen the glaciers, as the glare from the snow affected our eyes. roaring torrent rushes out from under the snow—that is, frozen snow forms a natural bridge over the torrent. On ground from which the snow had but recently melted, large numbers of Primula rosea were Sonamarg is on the road from Srinagar to Ladakh, and we met numbers of Ladakhis, either on their way to Srinagar with Numdah rugs or returning to Ladakh. They are a primitive and picturesque people, but very dirty. They still use tinder-boxes. and are always anxious to get matches, accosting every one of the few Europeans they meet with the word "matches," the only word of English they know.

No description of the Dal Lake would be complete without some reference to the Floating Gardens, which are quite remarkable in their way. The foundation is formed of reeds and similar water-plants roughly matted together. On top of this, soil is placed, and vegetables grown in it. Several kinds are thus cultivated, the commonest being Tomatoes, Melons, Cucumbers, and Brinjals (Egg-plants). The gardens are tied to poles to prevent them drifting about. I often saw fresh ones being towed about the lake.

The Kashmiris have a pretty custom of planting Irises on graves, and so, outside each village, the little unenclosed spot where "the rude forefathers of the hamlet sleep" is, during the springtime, a waving mass of Iris blooms. The Lotus (Nelumbium speciosum) grows plentifully in the Dal Lake, but is most luxuriant in front of the Nishāt The Kashmiris have a sort of Lotus festival, and thousands of people come from Srinagar and elsewhere to see these chaste and beautiful flowers when they are at their best. Perhaps I ought also to mention the wild Roses, of white and various shades of pink and red, which grow in great profusion. A wild Rose bush was often the most striking object for some distance round. Prunus prostrata, looking like a wild Rose from a distance, with its deep pink single flowers, was also very conspicuous. In the Kashmir valley itself wild flowers do not apparently grow in great variety, although I found such plants as White Clover, Spearmint, Malva rotundifolia, Alisma, Spiraa, Butomus umbellatus, Spiranthes, Poppies, and Buttercups. A blue Salvia, perhaps S. Verbenaca, grew abundantly in poor and dry soil. It is, however, to the higher elevations of 8000 or 9000 feet that one has to go for wild flowers, and there they are to be found in the greatest profusion: Primulas of several sorts, Lychnis, Silene, Potentilla, Columbines, Pansies, Strawberry, Viburnum fætens, Wild Indigo, Delphinium, Jacob's Ladder, Pæony, Rhubarb, Violet, Aconite, Podophyllum, Erysimum altaicum, etc. - quite enough to bring back memories of Kew and a vasculum. One plant, which I should very much like to have found in its wild state, was Meconopsis aculeata. It grows in one or two of the upper valleys, but I was unable to get to them.

Among more or less familiar trees were such as the Sycamore, Ash, Cottonwood, Mulberry, Birch, Walnut, Horse-Chestnut, Cedar, Spruce, Pinus excelsa and P. longifolia. But without doubt, however, the outstanding tree of Kashmir is the Chinar, Platanus orientalis. It is a tall-growing, spreading tree of noble aspect, and is said to have been introduced from Persia about 300 years ago. It is now found all over the valley, and is one of the glories of Kashmir. The largest specimen I saw—and, I believe, the largest in Kashmir—has a trunk 56 feet in circumference: "'Some' tree," as an American in our party said. English fruit-trees do well in Kashmir. We were too early for the Apples and Pears, but were just right for Peaches, Apricots, and Cherries, and also Strawberries, so we didn't do badly.

On our return journey from Srinagar to Barramulla we went by road instead of by water. The distance is about 34 miles, and the road is one long avenue of lofty Poplars. The Poplar makes quite a good avenue, but after 34 miles of it one hopes to see no more Poplar avenues for a long time. Our journey out was not so uneventful as our journey into Kashmir. There had been heavy rains, and the road was washed away in several places. At one rest-house we were told that a bad break about six miles farther on had been temporarily repaired, so we went on, to arrive at the place 15 minutes after the temporary bridge had given way. Down the small ravine a sort of muddy ooze was moving. It was like a quagmire, and it was quite

impossible to get our tongas over it. As it appeared to be nobody's business to repair the bridge, we collected some bullock cartmen (there were hundreds of bullock-carts waiting to get over) and started out to repair it ourselves. We built up the sides with stones and some railway-sleepers that had been used for the previous structure, got up three big pine logs from the Jhelum about 100 feet below (thousands of these logs are floated down the river every year), placed them across the gap, put some more railway-sleepers over them, and thus, after several hours' hard work, made quite a substantial bridge. We heard from some people who came down two or three days later that our bridge was still doing duty. Lots of people ought to have been grateful to us. If we had not done this work ourselves, we should probably have been held up for several days at the rest-house six miles back.

The road was damaged in several other places, but not badly enough to delay us, and two or three days later we reached Rawal Pindi safely, and my trip to Kashmir was but a memory.

W. HEAD.

#### STRAY THOUGHTS FROM CEYLON.

It is now some 20 years since I left Kew to take up the position of Curator of the Royal Botanic Gardens at Peradeniya, then under the able direction of Dr. Trimen, F.R.S. The voyage to the island of "spicy breezes" took just over four weeks, and was made in a liner noted for her rolling propensities and nicknamed "Rolling Rewa"—a designation since justified, for she rolled once too often.

At Colombo the heat, though intense, was tempered by the rich vegetation, which struck me as gorgeous. Brightly-coloured Crotons, Acalyphas, Dracænas, Aralias, etc., here vied with each other in luxuriance, in spite of the fact that the soil seemed but little better than red gravel. But it was obvious that what the soil wanted in fertility and humus was made up for by the copious rainfall and hot steaming atmosphere. By the way, a day's rainfall here may be equal to a whole year's precipitation in England, but the ground and roads dry up rapidly; one rarely sees muddy roads. To-day some of the first-class hotels and shops in Colombo compare well with the leading ones in the West End of London. One hotel, recently completed, has some 600 bedrooms, employs an excellent band, and theatricals are held on the extensive roof-garden at night.

One of my pleasantest experiences on landing in Colombo was to be met by my acting Chief, an old Kewite, Mr. William Nock. A veteran horticulturist, Mr. Nock was also a keen athlete and a sturdy volunteer-soldier. He retired in 1904 from the post of Superintendent of Botanic Gardens at Hakgala, which, by his keenness and skill, he had made one of the most beautiful hill-gardens in the tropics. He has returned to his home in Worcestershire, where he is now engaged in various military duties.

The stranger to the tropics must be prepared for many surprises. It took me some time to become accustomed to the myriads of fire-flies which fill the air at night, fearing every minute to find my bungalow or myself on fire. The weaver-bird suspends its long woven nests like very long stockings from the tips of tall trees or bamboos; these are finished with a loop handle underneath, in the arching roof of which there is always stuck a lump of mud, the only use of which, it is supposed, is for the male bird to stick a fire-fly in at night for the purpose of lighting up his domicile! In a land of such abnormalities as these it will, perhaps, be no surprise to the reader to be told there are flying lizards, also flying foxes and flying squirrels (the last-named attaining a size of about 4 feet in length); there are also fishes that fly and others that sing, frogs that whistle, and even trees that bark!

Next to the climate, what closely concerns the new-comer to Ceylon is the question of snakes and wild animals, but with reasonable precautions the snakes do not really constitute a serious source of danger; they are, however, plentiful, and comprise numerous and venomous species, including the hooded cobra, whose bite is rapidly fatal. The ever-suspected presence of snakes, scorpions, giant spiders, ferocious ants, and such like creatures does undoubtedly rob a garden in the tropics of much of its charm. So long as they confine themselves to the garden we do not demur, but we do protest when they insist on sharing our boudoirs and bedrooms. Some, especially frogs and centipedes, have an annoying partiality for getting into one's boots.

To the sportsman there is a varied choice of big game with just sufficient danger and discomfort to give it a "snap." Elephants abound in various districts—also black bear, leopard, buffalo, elk, pig, jackal, and monkeys. Crocodiles and iguanas are plentiful in the lagoons and rivers. The bird-life is plentiful and varied; some birds are very beautiful and many are proportionately ugly, and with few exceptions their song is grotesque and extremely monotonous, being sometimes most irritating, as in the case of the "brain-fever" bird.

To the entomologist Ceylon is a veritable paradise. The insect-world is as varied as it is perplexing, even awesome to some people. There are ferocious ants which live in trees and make nests of the leaves, others which live under the ground and raise enormous castellated earthworks up to 8 or 10 feet in height; the "leaf-insects" so closely resemble green or autumn leaves that they frequently mistake each other for the genuine article, and the "stick-insect" looks exactly like a dried dead twig. Perhaps the most unpleasant creature to look at is the venomous tarantula, a gigantic hairy spider which inhabits trees and lives on birds.

The chief industry in Ceylon is, of course, agriculture—or "planting," as it is called. It is not really agriculture as understood in Europe, but rather horticulture or forestry, since the crops are nearly all perennial. Nevertheless, the methods of procedure are much more scientifically followed than with agriculture in Europe, and the

planters are, as a body, men of public school or university education. Costs under each item are worked out to decimal fractions of a penny—thus, for example, from a manager's report for the past year: Rubber, average gross selling price, 2s. 3·34d. per lb.; cost laid down in Colombo, 10·23d. per lb.; sale expenses, 2·02d. per lb.; administration expenses, 0·47d. per lb. It is similar with Tea, Cocoa, and other crops. Thanks to a great diversity of climate, Ceylon can grow almost every tropical and subtropical product, and some temperate ones. It is regarded as the leading agricultural country in the tropics, and has led the way in Rubber, Tea, Coco-nuts, Cardamoms, Cinchona, and Cinnamon. Law, and next to it medicine, is the chief profession of the Ceylonese.

Ceylon, owing to its geographical position and prosperous industries, has not suffered from the War so much as some other colonies. Few parts of the Empire, however, have done "their bit" more than the European population of Ceylon. About 20 per cent. have left for the front, many at their own expense, having thrown up lucrative posts or left valuable property. The number would have been greater were it not for the check which has been imposed, a measure which recent events have justified. We are now practically all in khaki, and nearly every male member of our staff belongs to some military corps. Our lawns have been converted into drilling-grounds and our shears into swords, so to speak. So I think England can take a lesson from Ceylon and the Straits Settlements.

Well, I have not told you much about these famous Gardens, but probably you do not want too much "shop" at present. Parsons's energy as Curator of the Royal Botanic Gardens, Peradeniya, promises well, and the maintenance of the traditions of what are reputed to be the finest gardens in the tropics may be relied upon so far as Kewites are concerned (insert blushes here). The "Official Illustrated Guide" (by the writer) which I am sending you will convey some impression of their beauty and treasures. You will see that the European staff alone now extends to twelve men—or "officers," as we are called. The Gardens, situated at 1500 feet above sea-level, and therefore agreeably cool, date back over a hundred years, and include a Museum of Economic Botany, an extensive Library, a large Herbarium, and a Laboratory. Connected with them are three Experiment Stations, three branch gardens, and several other official gardens.

H. F. MACMILLAN, F.L.S.

# KEWITES IN THE FAR EAST.

At this time, when our Empire is fighting to uphold the sanctity of solemn treaty, fighting to substantiate the right of small nations to exist and develop on their own national lines, fighting for its existence and for all our forbears welded for us, fighting for hearth and home, and for everything that twentieth-century civilisation holds dear, it is

fitting that Kew men should be in the forefront. In the field of peaceful endeavour Kew men have accomplished much to their own credit and to the honour of the Empire. In Africa, which used to be called the Dark Continent, Kew men have made "blades of grass grow where none grew before." They have been instrumental in establishing new agricultural industries which have bettered the condition of the native born, and have added materially to the real wealth of the world. In India, in the West Indies, and elsewhere the same is true.

At the Guild Dinner, on May 30th, 1904, Sir William Thiselton-Dyer, in responding to a toast, said: "With regard to Mr. Chamberlain's advice that we think imperially, he claimed that Kew had done so for the last half century or so." He could have said for more than a century, and have added that her sons had interpreted the thought by constructive work of an imperial—aye, an universal—character. There are very few places in this old world of ours that have not known Kew men, and it is trite to say that, wherever they have gone they have accomplished something for the good of the Empire, for the betterment of the world at large. Some much, others less, but all to the best of their abilities while strength and life were theirs to give. Such is the spirit of Kew. Such is the expression it has found in her sons, who, for more than a century, have blazed trails of benevolent enterprise in many dark recesses of the world. Their bones and dust lie scattered far and wide over the five continents, but the spirit ever gains strength.

In the Guild Journal for 1895 and for 1897, there are notices of the labours of a number of old-time Kewites. These notices are of great interest and of much historical value, and it is to be regretted more have not appeared from time to time. In this connection, and in the hope that it may induce others to record the doings of Kewites in various parts of the world, it may not be out of place to mention briefly the Kew men who have found a field for their labours in China and Japan.

The first Kewite to visit the Far East was David Nelson, who accompanied Captain Cook on his last voyage round the world (1776–1780). The expedition touched at Macao, and Nelson introduced from there to England Rhus javanica (usually known as R. semialata), Hypericum chinense, Melastoma sanguinea, Asparagus lucidus, Lindsaya flabellulata, and a few other plants of less horticultural value. Nelson afterwards accompanied Captain Bligh on H.M.S. 'Bounty,' and was among those set adrift by the mutinous crew, and he died from long exposure after reaching Timor in 1789. L'Héritier founded the genus Eucalyptus on E. obliqua, which was discovered by Nelson in Tasmania.

In 1803, William Kerr was sent to China and remained in and around Canton until 1812, and sent home, among other plants, Kerria japonica, Gardenia radicans, Lilium tigrinum, Juniperus chinensis Lonicera japonica, and Bletia hyacinthina. In 1812 he was appointed

Superintendent of the Colonial Botanic Gardens at Colombo, and died there in 1814.

In 1857 the British Government presented a steam-yacht to the Emperor of Japan, and the occasion of its presentation afforded an opportunity for making botanical researches among the numerous islands of the Japanese Empire. Charles Wilford was appointed to the post, and after making a considerable collection returned to England in 1860. He died at Wimbledon, Surrey, in 1893.

At the time of Wilford's visit to the Far East the British Navy was there engaged in extensive survey work, and many remote islands were visited and accurately charted. To accompany these surveying-ships and collect plants wherever possible, Kew sent out Richard Oldham in 1861. He was most successful, and amassed an extensive and valuable collection. He died in 1864, and was buried at Amoy.

In 1871, on the recommendation of Sir Joseph Hooker, Charles Ford was appointed to Hongkong as Superintendent of the Botanic Garden and Afforestation Department, holding the position until 1902, when he retired. A Kewite, Alexander B. Westland, was sent out in 1883 as Assistant to Ford. He returned to England in 1890, and was transferred to an appointment at the Taj Mahal Gardens in India. Afterwards he resigned and migrated to the United States of America. In 1891, William J. Tutcher was sent out to Hongkong to fill the post left vacant by the transfer of Westland. To-day Tutcher right worthily holds the office of Superintendent.

On Ford's retirement in 1902, Stephen T. Dunn was appointed to the post, and held it until 1910, when he retired. Tutcher succeeded him, and in the same year Harold Green was appointed from Kew as Assistant to the Superintendent.

Those who visit Hongkong now and note its steep slopes densely clothed with trees, or stroll through its small but well-ordered Botanic Garden, find it hard to realise that fifty years ago it was a desolate and barren-looking island of rock. This change has been brought about mainly by the men mentioned, and is a lasting monument to the energy and ability displayed. Not alone on the Island has their hand been displayed, but on the mainland opposite, in the larger territory of Kowloon, their handiwork is largely in evidence.

The late firm of Messrs. Jas. Veitch & Sons, Ltd., in early March of 1899, applied to Kew to recommend a man to collect plants for them in China. The writer was selected, and proceeded at once to China, remaining three years, reaching England again in the late spring of 1902. In January 1903, a second journey was made lasting until 1905. December 1906 commenced a third visit to China, this time on behalf of the Arnold Arboretum of Harvard University, Boston, Mass. This trip occupied two and a half years. A fourth journey for the same institution occupied the year 1910. The year 1914 was spent in Japan (see Journal of the Kew Guild, 1915, page 231.—Ed.).

At the opening of the year 1909, an expedition to Northern China

was organised by the Messrs. Veitch and the Arnold Arboretum conjointly. A Kewite, William Purdom, undertook the work, and after three years' labour returned to England in 1912. In 1914, Purdom was again in China, this time in the interest of a syndicate, and at the time of writing he is still out there.

The Municipal Council of Shanghai, in 1899, decided to have someone from home to take charge of their Public Garden and open spaces, to develop certain playgrounds, and to start a park system. Kew was applied to, and Alec Arthur was appointed to the post. He arrived at Shanghai in the summer of 1899, remaining until 1904. Another Kewite, Donald Macgregor, took up the post and still occupies it, much to the advantage of Shanghai. In 1907 John Giles was sent from Kew as Assistant to Macgregor, and, on his resigning in 1909, he was succeeded by William H. Etterley.

I saw Shanghai before a Kew man took charge of its Public Garden and open spaces. I saw it last in 1911. The improvements and advancement were amazing. A large and comprehensive park-system had been evolved and was fast being developed. In a few years, thanks to the ability, energy, and tact of Kew men, Shanghai will have a park-system that will compare most favourably with that of advanced cities in western lands.

Through force of circumstances, not altogether unpleasant, it has been my fortune to meet a goodly number of Kewites labouring in distant lands. Everywhere to the best of their ability and power they are doing their bit to the honour of their race and to the glory of Kew. At this epoch in the world's history the slogan of Kew men is abroad. All together Boys—the best we have for the Empire and "Floreat Kew"!

E. H. Wilson,

Arnold Arboretum.

# IMPRESSIONS OF THE PANAMA-PACIFIC EXPOSITION.

After more than a fair share of fever in West Africa in my former appointment, the idea of spending some time in the beautiful climate of California was very pleasing.

I left England towards the middle of September 1914, and after an enjoyable trip reached New York, where, with the help of friends, including Mr. J. Harrison Dick, editor of *The Florists' Exchange*, I saw most of the important sights of that city. I then proceeded on a long but interesting trip across the continent of America, journeying through part of Canada, the Rockies, and across the Great Salt Lake.

At San Francisco, on October 3rd, I was formally engaged by Messrs. C. C. Morse & Co. to carry out important work in connection with their proposed horticultural exhibit at the Exposition. The city

had been re-built since the earthquake, and, after surveying the site, I designed and laid out an informal garden which was full of flowers from March to December, with bulbs in variety, a few perennials such as Geum Mrs. Bradshaw, Gaillardias, Aquilegias, Campanulas, Hollyhocks, and Chrysanthemum leucanthemum. Annuals, and other plants treated as such, were grown in great variety, and proved most attractive, as many were introduced to California for the first time. Some charming effects were obtained by Linaria hybrids and L. reticulata aurea purpurea, Antirrhinums in various shades, Godetia Schaminii, and pink Verbenas. A centre blue bed included Lupinus nigrescens and L. cælestinus, Kaulfussias, annual Anchusas, Nemophila insignis, Delphiniums, and Lobelia Crystal Palace. New varieties of waved Sweet Peas were grown in the background, on the cordon system, and grew to a height of 24 feet.

Our exhibit in the Palace of Horticulture was mainly of pot-plants, bulbs and annuals; we were awarded a Gold Medal for the former and a Grand Prize for the latter. This exhibit required a weekly change of 300 to 400 pot-plants. All the plants were grown at the Seed Trial Grounds by unskilled labour and transported over 20 miles to the Exposition.

The Exposition was held to celebrate the completion of the Panama Canal, which brings Liverpool 5666 miles nearer to San Francisco. The site selected for the Exposition overlooks the famous bay of San Francisco, with the surrounding hills of Marin County and Mt. Tamalpias in the distance. To see this "Jewel City" from across the bay was a beautiful sight, as the illumination was great. Of powerful searchlights there were over 200, and "the Scintillator," of 3,600,000,000 candle-power, with its many coloured rays, was a revelation. The lighting system is known as "Flood-lighting," all the electric globes being concealed.

The architectural beauty of the Exposition was one of its best International features, as it combined all schools of thought in its conception, examples being taken from all parts of Europe. Undoubtedly, the finest example was the Palace of Fine Arts, with an outer length of 1100 feet, a colonnaded front, and a rotunda 162 feet high. The construction was of steel and concrete. Around this was a Lagoon, about which trees and shrubs with Bamboos and Pampasgrass had been arranged, giving a beautiful landscape effect. This work was carried out by Mr. John McLaren, Superintendent of Golden Gate Park, who also superintended much of the landscape work at the Exposition, and has achieved splendid results, as the site was mainly sand, marsh, and mud-flats. The Tower of Jewels, 435 feet high, studded with 135,000 hand-cut glass jewels, was fine both by day and night.

The exhibits from the various industrial centres and large firms of the United States were largely representative, and those from other nations were very interesting. Although Great Britain had only a

small exhibit of pottery ware, lace, and a few other things, the Colonies were well represented. New Zealand had a fine agricultural display, while Australia and Canada also had their respective buildings. The Canadian display was the most imposing of all, both for artistic arrangement and educational features. Even live beavers were introduced into the scenery. This created a profound impression here. Among the exhibits from tropical countries was one from the Philippines, which consisted of Coco-nuts, fibres, Rubber, Tobacco, and forestry. Next came the Argentine, with a large display of timber, wool, and various other products, over 5000 exhibits being displayed. Cuba, Guatemala, Honduras, Java, and the East Indies all had exhibits of interest. Even Siam had a quaint building, constructed in that country. China, Japan, Hawaii, Norway, Panama, Sweden, Bolivia, Denmark, Greece, Holland, Italy, Portugal, Turkey, and France all had fine buildings. That of France contained a large collective exhibit of beautiful tapestry, arts, and industries, while Belgium had also a space for an instructive exhibit.

Almost all of the States of the Union had their buildings, some of which were well filled with exhibits. Oregon and California had some well-arranged fruit exhibits in the Palace of Horticulture. There were also some unique displays from the various States, and fruit-canning could be seen in progress.

Horticulture held a foremost place at this Exposition, and the Palace of Horticulture was a most imposing structure. The immense dome was 186 feet in height and 152 feet in diameter, and surrounded by numerous towers. Under the dome was a tropical exhibit of Royal Palms, Mangoes, Bread-fruit, Cycads, Dicksonias, etc., from Cuba. Outside, the main avenues were marked out with large specimens of *Phænix canariensis* and *Washingtonia robusta*, while *Eucalyptus globulus* and Acacias were used largely for grouping round the buildings. The Monterey Cypress was also much in evidence. There were various courts in which Conifers, Myrtles, Acacias, and fruiting Orange-trees were used with effect. Nine acres were devoted to the outdoor display, mostly trade exhibits. This was in addition to the North and South Gardens and the Japanese Gardens.

Mesembryanthenum roseum was used to produce a wall or hedge by planting it in boxes nailed sideways to a framework. This floral wall surrounded part of the Exposition grounds, which, by the way, covered 635 acres, with a two-mile water-front. The total attendance was over eighteen millions, and had it not been for the War it would have been larger.

ALBERT R. GOULD.

#### AGRICULTURE IN NIGERIA.

The headquarters of the Agricultural Department at Ibadan—Moor Plantation, as it is called—lies some three miles from the railway-station at Ibadan, and is in extent about 300 acres. It is divided into square blocks of ten acres each, which facilitates the measuring off of plots. Originally it was run by the British Cotton-Growing Association, but was taken over by the Government about six years ago.

Two small valleys run through it, having streams in them. These are useful in the growing of Cocoa, about  $8\frac{1}{2}$  acres being laid out. Plantains are used as shade while the Cocoa is young, and are planted at distances of 12 ft.  $\times$  12 ft. and 15 ft.  $\times$  15 ft. apart. Rain-trees are also used for the same purpose, at 45 ft.  $\times$  45 ft. apart. The Cocoa is chiefly of the Amelonado and Criollo varieties, though we have small plots of Venezuela, Surinam, and Forastero Cocoas also. In the nursery we grow a supply of young Cocoa-plants, which are distributed to the native farmers for a nominal sum.

The native Cottons are very poor varieties, and not at all prolific, so experiments are being carried on with various American kinds, which have so far proved satisfactory. The "leaf curl" disease, so prevalent among the native Cottons, does not affect the American varieties, and if they continue immune it will be a great deal in their favour.

Chief among the varieties of the American Cottons are:—"Upland," "Georgia," "Jones's Improved," and "Griffin." They are sown about the middle of July, on ridges, and the Cotton is picked about the first two months of the following year. The B. C. G. A. ginnery, adjoining the Plantation, takes the seed-cotton, and it is ginned, the lint being sent to England, the seed returned to us.

Two kinds of rubber are grown on the Plantation, viz., Ceara (Manihot Glaziovi) and Pará (Hevea brasiliensis), but no tapping has yet been done. The disease Polyporus (Fomes) lignosus has caused much damage in some parts.

Coco-nuts (*Cocos nucifera*) are planted on ten acres, and small Coffee-plots have this year been planted with Arabian, Liberian, and Abeokuta varieties.

The local White Lagos Maize is sown twice in the year, as are all cereals, there being two rainy seasons annually.

Ground-nuts (Arachis hypogea) are grown, and should be a successful crop for the native farmer, though at present very little is done by him in this line. Quantities of decorative and fruit trees are grown in the nursery for distribution to anyone who likes to apply. They include Allamandas, Acalyphas, Albizzias, Poincianas, Arecas, Limes, Oranges, Pineapples, Bananas, Pitanga Cherries, and Shaddocks.

A new system of training students has recently been started. The pupils, who are educated natives, have the opportunity of learning the practical and theoretical elements of agriculture. They work daily in the Plantation, and lectures are to be given them on General Elementary Agriculture, Entomology, and Mycology. When the course is completed the students are to be sent out as Agricultural Instructors. If this scheme is successful, it will, I am sure, be a step up—a great difficulty one has to contend with is the conservatism of the native. He will not change his old methods for new and better ones. If these young men can be made efficient, the natives are more likely to listen to them than to white men, on whom they look with a certain amount of suspicion. Better methods in the cultivation of the land would be used, and I am confident that it would then not be long before Nigeria becomes one of the richest parts of Africa.

ALF. R. BELL.

#### A KEWITE WITH KITCHENER'S ARMY.

PARTAKING of a short but very welcome rest gives one time for reflection. I often wonder, when thinking of what our battalion has gone through, and the many narrow escapes, how I managed to get through unscathed on those fateful days of the 25th and 26th September, 1915. Never once, however, have I regretted offering my services to my King and Country. I am very proud of the fact of being one of Lord Kitchener's first 500,000, having enlisted at Richmond on the 7th September, 1914. Our first move was to Maidstone. We stayed only a few days, leaving for Shoreham, Sussex, where the battalion was formed. At Shoreham we were initiated into the mysteries of squad, platoon, company, and battalion drill, which at that period I thought was waste of time, and used to think the War would be over before our training was finished. During this period we were still in civilian clothes. It is still very amusing to me when I think of the many speculations made regarding the kind of uniform we were to have, and the shock when it arrived. This, however, did not damp our spirits in the least, as it is not "the clothes that make the man." During this time we were under canvas, and, the weather being very bad, we were not sorry when, on November 30th, a move was made to Worthing into billets. No words can express our gratitude to the landladies; it was a proper "home from home," and I am sure if they had had their wish we should still be at Worthing. On April 1st we moved to Redhill, Surrey, to undergo a course of trench-digging for three weeks, returning from Redhill to our old camping-ground at Shoreham, this time into huts which had been erected during our absence. We remained there until July 9th, when orders came to move to Blackdown, near Aldershot, to complete our course of firing. The journey was made by road, taking us three days.

On arrival all set to work in real earnest to become fit to take part in the great struggle. At last came the long-expected news; we embarked on August 29th, and on the 30th were in France.

Travelling up country, we reached a little French village, and remained there for nearly a month. On the morning of September 25th, we were told of the proposed "Great Advance." Never before had excitement reached such a pitch. One would have thought the last thing to cause excitement was the prospect of a big fight. Little did we think what was to be our lot. In twelve hours from starting for the trenches we received our baptism of fire, and in twenty-four hours had made a name for ourselves and for Kitchener's Army. I shall never forget my experiences during that terrible time. We took over trenches from which the Germans had been driven during that day, and the dead lay everywhere. I saw German bodies piled high where our men had caught them; it was raining, which did not lessen the grimness of the scene. All this time we were being shelled by the Huns. Next day (Sunday), about eleven o'clock. orders came to "charge." This is the time to see the British expression of grim determination. Like one man, officers and men were over the parapet; then it seemed as though the earth was split in two. Shells, shells everywhere, machine-gun and rifle-fire; on, on we went, losing many an old pal on the way, which only made those remaining still more determined. At last we got to grips, the results of which you have read; only one of our officers who went into action that day came back unscathed, showing that we were in the thick of the fighting. The sights I saw during that time require iron nerves to endure.

It was always my wish to see the country, and my wish was gratified. We marched across France and back again, also a part of Belgium, which reminds me of a joke made by one of our men when going up to the trenches. The conversation turned to the number of miles we had marched during the time we had been in France, and he said, "I have done France twice, and half Belgium, and the other half I've put into sandbags." Poor fellow! he was killed next day. The name of the Royal West Kents will never be forgotten. It was the doings of our first and second battalions that made us determined, and certainly helped us by the example they set. It is a source of satisfaction to know we did not disgrace them, and they are proud of us. Two of our officers have been decorated—one with the D.C.M. and the other with the Military Cross. It may be of interest to you to know the opinion out here regarding peace. This must be only at our price, and must be a lasting one!

I should like to add that nothing would give us greater pleasure than to see the ranks filled up by volunteers; but if men will not come voluntarily they will have to be fetched. This war must be finished and peace determined by men and guns, not by the whimpering and whining of deluded and starving Germans. Sgt. WALTER DUNK,

Royal West Kent Regt.

#### CORPORAL HERBERT COWLEY.

MEMBERS of the Guild will hear with regret that Mr. Cowley has resigned the positions of Secretary and Editor of the Journal, which he has so ably filled for four years. Temporarily relieved of the duties while on active service, Mr. Cowley's resignation is due to his appointment to the important position of Editor of The Garden. Only those intimately connected with the work of the Guild are able to appreciate fully his untiring efforts to make it a real live institution. Tactful and courteous, Mr. Cowley has left no stone unturned to foster the brotherly (and sisterly) feeling among Kewites throughout the world. Brief particulars of our friend's career will be of interest to our readers.

Mr. Cowley studied at Swanley Horticultural College before that institution became exclusively devoted to the training of ladies. Previous to entering Kew, in October 1905, he worked in the important gardens of Lockinge House, Wantage, the Royal Gardens, Frogmore, and Messrs. Jas. Veitch & Sons, Ltd., Feltham. At Kew Mr. Cowley made his mark as a plantsman, and it will not be giving away a secret to chronicle the fact that there was some rivalry among those in charge of two or three departments to secure his services, the Orchid Department proving the successful competitor. Mr. Cowley's doings at the "Mutual" and in the Lectures are recorded in the Journals for 1906 and 1907. He left Kew in December 1907 to take up a position on the editorial staff of The Gardener, and in 1910 was appointed Assistant-Editor of The Garden. His recent appointment to the editorial chair will be known to many members. He is a member of the Floral Committee of the Royal Horticultural Society and the Committee of the National Sweet Pea Society.

Soon after the outbreak of the War, Mr. Cowley enlisted in the 12th County of London Regiment (London Rangers), going out to France in December 1914. He was twice wounded in the fierce fighting around Ypres in the spring of 1915, and, although now in good health and able to attend business, he has a stiff leg resulting from a shrapnel-wound of the knee-cap, inflicted while bandaging a comrade, making it awkward to climb steps, even with the aid of a stick. He has been granted temporary release from military duties; there is, however, a possibility of complete recovery.

Though no longer our Secretary and Editor, it is hoped the Guild will still have Mr. Cowley's valued help, the Committee having coopted him as a member of that body to fill the vacancy caused by the death of Mr. F. W. Harvey. This action, we feel sure, will be endorsed by members at the next Annual General Meeting.

Mr. Cowley's name appears this year under the heading of "Wedding Bells." Members of the Guild will unite in wishing Mr. and Mrs. Cowley long life and happiness.

on the hillsides. There are some fine Arums (? Amorphophallus) growing amongst the stones, very like large A. maculatum, but of a much finer colour, being deep crimson at the base of the cup. I found one 25 inches long. The commonest fern on this hill is an Adiantum, I believe it is A. caudatum, but of this I cannot be certain. There is a very pretty little pink Primula in flower now, also large masses of blue Aquilegias growing in a thick carpet of Adiantum. The latter is a sight that would beat the Bluebells at Kew. (Perhaps!—Ed.) Berberises, Loniceras, Hypericums, and a white Clematis are now in full bloom. The terrace-cultivation on the hillsides along the Kashmir road is very interesting. The natives have built retaining-walls with boulders and loose stones, and have utilized every possible inch of ground.

"It has been continually rumoured that the battalion was going to move away, so few of us have been able to settle down properly. I started to make a collection of dried specimens, but had to give it up, as the space allowed for a soldier's kit was not sufficient. I am afraid I am forgetting a good deal, as many of the plants we come across are quite familiar to me, but I cannot recall their names. The commonest trees round here are Cedrus Deodara, Cedrelas, Horse-Chestnuts, Poplars, Oaks, and Pines. Clematis also are very common, being represented by about half-a-dozen species.

"It must be difficult for people at home to realize that this is a more or less hostile country, and that it is dangerous to wander far from the cantonments or roads. About a month before we left Kuldana a very sad affair happened. One of our companies was sent to some barracks about 15 miles away to remove the married people and stores left there. On the road down two natives suddenly shot two of our men who were by themselves, and hidden from the others by a bend in the road. One poor chap was killed, and the other shot through the neck, but fortunately he has recovered. The natives got away with one rifle, but the police have arrested several who are supposed to belong to the same gang, and probably by this time they are dangling at the end of a rope. The fighting on the frontier has been pretty severe, and we certainly owe onr 'black brethren' a pretty big score. I often spend my spare time making up things to say to church friends at home who may ask me for a donation towards a missionary society in India! The dead and wounded after a fight are mutilated in all sorts of ways, chiefly by the women, who certainly do their work thoroughly. The natives are experts at slow torture, and every man is warned to keep his last shot for himself.

"A week before the troops started to move back to the plains I was one of a party of twenty sent about 12 miles down the road to erect a rest-camp at a place called Tret. We remained at the camp for six weeks, and managed to get about a good bit, securing some interesting photographs, a few of which I enclose. (We are able to publish four.—ED.) Around Tret there are some very fine Pine-forests, and I was

interested to find the natives 'tapping' the Pines, though unable to find out what became of the resin they collected. All the papers out here have published the interesting news that 'lady gardeners' are employed at Kew. Someone sent out an illustrated paper with a picture of two of them at work, but I think the Censor ought to have suppressed that picture! I have not yet had the chance of visiting any of the Botanical Gardens out here, but if I can get a decent furlough I shall try to visit Lahore, Lucknow, and Allahabad, if my small stock of rupees will stand it.

"The 'No-Treating' order is not in force out here, but the man who gives his pal a pint in the Canteen here stands a jolly good chance of being run in for poisoning, the liquid they call beer only resembles the real stuff in colour."

Corpl. H. B. Lloyd, of the Rocky Mountain Rangers, writes under date May 9, 1915:—

"I received the Journal when on furlough here, having been on duty since last fall. Previous to the outbreak of war I joined our district Territorial Force, the 102nd R.M.R. Canadian Militia. When war was declared in August we were stationed at Kamloops, with bridge-guard duty from there through the Rocky Mountains to Barnff on the Canadian Pacific Railway. Being a N.C.O. I had charge of a bridge in the Rodger's Pass, Selkirks. Although necessary work, it became rather monotonous with no excitement to relieve it. Naturally the winter at this altitude is decidedly cooling, though the authorities made us as comfortable as possible, but to turn out of one's blanket at midnight and go on duty for a couple of hours with the temperature somewhere below zero made us wish the Germans in a warmer climate.

"When the second Canadian contingent was recruited I volunteered, but was rejected, having too many teeth of the artificial variety. I am back on bridge duty, and am hoping in the near future they will not be so strict. I shall be glad when these heathen are squashed to a finish. My kind regards to the old boys of '97."

[A photograph enclosed with the letter depicts Corpl. Lloyd shouldering a rifle, on duty guarding the railway along a lonely mountain side.—ED.]

Mr. Frank Gammon, S.C., writes from the Congo Belge on July 4, 1915:—

"The voice of one crying in the wilderness salutes the members of the Kew Guild. The advent of the current issue of the good old Journal is truly a boon in these wilds. Unlike many similar publications, it is replete with interest from cover to cover. Dear old Journal! My love of thee grows more and more. I am glad to see Kew has given of her best in the nation's hour of need. No doubt Kewites will prove as adept on the battlefield as they have in the plant

world. After twenty years of patient waiting, I have joined the ranks of Kew men in the Dark Continent. In September last, thanks to the war scare, some kindly passenger gave up his berth on the 'Ceramic,' and I was soon en route for Cape Town. My stay in that delightful town proved a short one, owing to continued ill-health, to which I had been subject for the previous twelve months at home. It was brought on by a nervous breakdown due to over-study and an indoor life. How can the average Kewite settle down to an indoor life?

"Shortly after Christmas I found myself at Elisabethville in the Belgian Cemetery,' as the *Journal* calls the Congo, and on May 25th I left that fine little town for this place, which is about 90 miles north-east of Elisabethville.

"Elisabethville boasts of a white population of about 1000 and 8000 natives, and is situated in a hot-bed of white ants (not a guide-book phrase) which make agriculture almost an impossibility.

"Lions and two kinds of leopards are not uncommon in the forest—I remember six lions having been reported in the neighbourhood at one time. The lion doesn't seem to visit this part of the country very often, but crocodiles and hippopotami come instead. We have about fifty acres of fertile soil here, bordering on a river 150 yards wide. The tsetse fly is scarce, but I made my acquaintance with him en route, and am not likely to forget it in a hurry.

"Katanga is one of the best-watered countries in Africa, and yet I find agriculture practically non-existent. How much I would like to see a few Kew men out here. Doubtless it will be years before Belgium rises from the ruins, and is able to supply the class of men so badly needed here.

"Like most Kewites, I found Africa a very different place to that anticipated, full of surprises not unmixed with disappointments—yet in all a beautiful land, and not so unhealthy as one is given to believe.

"Day by day I feel more grateful to our *Alma Mater* for all she has bestowed on me in regard to plant knowledge."

Staff-Captain W. B. LITTLE writes from "Somewhere in France":—
"Since joining the Army in September 1914, I have had many interesting experiences. For some time I had an armoured car on the east coast. At the beginning of April, when the Northumbrian Division was ready for embarking, I was appointed to the Brigade Staff from the 9th Durham Light Infantry. To record all the Division has been through since that time would fill many pages of the Journal. We left the North of England on a Monday, and on the following Friday reached the awful place known as the Ypres salient. Rushed up to support the Canadians, right well our men did the work. During the second battle for Ypres it was simply hell, and the number of men lost was considerable. Nevertheless, our Northumbrians fought unflinchingly, as they also did later at Hooge and near Hill 60. We

were in the first gas attack; in those days respirators and smoke-helmets were not available. Reconnoiting near St. Jean a determined attack was made by the Boches with chlorine and gas shells. Getting more than was good for me I was knocked out for a time, but not seriously, managing to stick it for a fortnight before collapsing, and much against my will was sent to the Base and England. Never mind, I managed to defeat the Medical Officers, and after a fortnight in England, returned to the front. We have had a turn on most of the British line down to Armentières. At the present time our Head Quarters are in a dug-out on what is acknowledged to be the worst part of the front. More I cannot say. Our men are quite cheerful and confident, as they realize we are 'top dog.' My brother Charlie, who was at Kew, joined one of the New Zealand contingents and was seriously wounded in Gallipoli.

"I never hear any news of Kew, but don't doubt but what it has done all it should in swelling the ranks. I presume, and hope, not a single young man, medically fit, is now employed in the Gardens. I rather think the Army will get the remainder of my active days. It is a grand life. Staff work is laborious and never-ceasing, but very interesting and gives plenty of scope for one's energy, often for twenty out of the twenty-four hours."

Mr. C. E. F. Allen, who is now serving with the Australian Forces, sends a letter from a Transport Ship; the date and the name of the boat have been censored. He writes:—

"We are nearing the ...... after a month at sea. We called nowhere since Sydney, and the voyage has been uneventful on the whole. We buried at sea five of our number who died from pneumonia, etc., events sad with that peculiar sadness that one feels in a military funeral with its firing and the plaintive notes of the Last Post. Generally, I have enjoyed the voyage—not with the happy anticipation of some journeys I have had, but with a calm philosophy born of a contented and easy mind. One has a feeling that the future is not worth worrying about, and the soldier must perforce be an optimista cheery one at that—else he is not worth his epaulets. Very few, if any, of us will shed tears of sorrow if this war ends before we get there; but none of us believe that possible, and we are solid for a good fight. I do not feel any more blood-thirsty than I have all the long years I have known Kew, but I certainly feel more able to become so owing to the art I have acquired in the use of the rifle and bayonet. Of our battalion 45 per cent. are home-born; they are a cosmopolitan lot, some fine fellows and mostly strong athletic men and youths. We ought to make our mark, given an even chance. At the time of writing we do not know where we are going, but surmise it will be Egypt for a time. We have had sports on board. I pulled in the tug-of-war (two teams of ten men pulled for each company, and I pulled in No. 1 team of B Coy., and we pulled every team and became

the champions of the regiment), secured a prize of 10s. (a consideration to yours humbly, since I became a 5s. a day man), and I must say I was most pleased to be in the best team. Our Major captained the team. We have also had some good boxing shows, but I give that a wide berth except as a spectator. There is much humour on board, and one gets a lot of fun out of things. I was delighted with a youth (an Australian) who, being exceedingly sick of mal de mer, was overheard to remark between spasms 'I vote we ask the . . . . Turks to come and fight us in Australia next time.' He was probably a regular attendant at boxing contests for world championships at Brisbane. By the way, by one of those weird coincidences of which life is so full, our Brigade Chaplain, Padre Smith, as he is affectionately called, is an Old Kewite, and used to be in the Curator's office. I have had several talks with him."

In response to the Editor's request for a few particulars of his experiences, Transport-Sergeant R. Kett, of the Queen's Westminsters, writes under date December 19, 1915:—

"I joined the Queen's Westminsters in February 1909. When war broke out we were in camp on Salisbury Plain and had to return to London at once for mobilization. We were duly equipped and sent to St. Albans on August 14, 1914, for hard training. After two and a half months of it we received marching orders. Without getting so much as an hour's leave, we found ourselves at Southampton en route for Havre, landing there on November 1. Two days' journey in cattle trucks, living on bully beef and biscuits, proved anything but comfortable, but we reached St. Omer safely. From there we marched up to the firing-line and went into the advanced trenches on November 16 to relieve the West Yorkshire Regiment, which had been badly cut up.

"Our longest turn in the trenches without being relieved was twenty-one days. That was just after Christmas. We were knee-deep in mud and water for some time. Our average spell in the trenches after this was five days in and two out. Up to the time I was hit, on the night of February 27, our regiment had not had a rest. It was not until they had been in the firing-line exactly a year that they were ordered back eight miles for three weeks' rest. At the time of writing, the regiment is back again to spend their second Christmas Day in the trenches.

"I was invalided home to Nottingham on March 6, a stretcher case the whole way from the firing-line. After seven weeks in hospital I was able to join the 3rd battalion in Richmond Park, and three days later, on May 1, was promoted Transport-Sergeant. We have spent a busy summer training recruits to fill up the 1st battalion at the front, and recently have moved to billets in Kingston-on-Thames. I am ready and fit to go out again, which may not be long, to 'Somewhere in France,' though I hope to spend Christmas in good old 'blighty.'"

# OUR ROLL OF HONOUR.

GARDENERS OF EMPIRE.

Tillers of the soil they were—just gardeners then,
In faith the day's work doing as the day's work came,
Peaceful art in peace pursuing—not seeking fame—
When through the Empire rang the Empire's call for men!

Gardeners they were, finding in fragile flowers delight, Lore in frail leaves, and charm even in wayside weeds. Who, in their wildest dreams, ne'er rose to do brave deeds, Defending righteous cause against relentless Might!

The wide world gave her flowers for them—the mountains high, The valleys low, and classic hills all fringed with snow Where fires by sunset kindled light the alpen-glow.

O! Fate implacable!—to see those hills and die!

The war god rose refreshed—Gardeners and Soldiers then! Who, that slumbering Peace might wake, dared, with manhood's zeal, To make Life's sacrifice to Love's supreme appeal. For King and Country fought and died—Gardeners and Men!

H. H. T.

Since the last Journal was published, the list of British Kewites, Past and Present, whom we know are serving with the Colours, has doubled. The list of present members is complete, but though every endeavour has been made to obtain information of Old Kewites, the names of some will be missing. Many are now on Active Service, and we are able to publish several interesting letters; a number have been wounded, and three, whose portraits we publish on another page, have given their lives for their country. Nine hold commissions, and a large number have gained promotion to non-commissioned rank. As our list of these is very incomplete, it is thought desirable not to publish the latter at present.

Lieut. Digoy (now Captain), 14th Infantry Brigade, has been awarded the Legion of Honour for distinguished bravery. We extract the following from the "French Army Bulletin": "Lieut. Digoy has given proof of marvellous energy and go. He has been most active in his work, but particularly so on December 24, 1914, when he was very successful in driving out of the newly-conquered trenches the rest of the Germans who were preventing his company from joining the battalion. He was wounded the same day. An officer of marvellous energy, who throws himself into his work without counting the cost, he inspires in his men the greatest confidence."

In writing of a German gas attack, the *Daily Express* records: "Captain Chipp, of the 8th Middlesex, found about twelve men of his company gassed during the bombardment on the morning of the 25th Aug. He went to each in turn, reviving them with handkerchiefs soaked in water." From the *Richmond and Twickenham Times*,

Sept. 4, 1915: "Captain T. F. Chipp was lying wounded in hospital when he heard of the fighting, and he persuaded the stretcher-bearers to carry him to the front, where he continued to command his men in the trenches they were holding."

The Rev. W.C. Smith, who went out to Queensland, is now Captain and Chaplain to the 7th Australian Infantry Brigade, last heard of in Egypt. Pte. C. E. F. Allen travelled in the same Transport from Australia, and several soldier Kewites have made his acquaintance at Alexandria.

Company-Quartermaster-Sergeant C. P. Raffill is "Somewhere in France," but is too busy serving out bully beef and biscuits to write a letter for the *Journal*. Since out there he has had a short spell in hospital with rheumatism.

Mr. J. Anderson was returning to West Africa on the 'Falaba,' when that vessel was sunk by a German submarine on March 28. He was among the saved, but apparently modesty has prevented his complying with the Editor's request to write of his experiences in the *Journal*.

Two employees from the Gardens were killed in action in France on the same day, Sergeant H. J. Smith, a garden labourer, and Private F. Windebank, pony boy, both of the East Surrey Regiment.

With the exception of one married labourer, the few remaining members of the staff and garden employees of military age who are medically fit have enlisted under Lord Derby's scheme.

Since the War broke out, 105 members of the staff and permanent employees have joined His Majesty's Forces from the Gardens.

#### OLD KEWITES.

C. E. F. Allen	Australian E. F.
*C. F. Ball	Royal Dublin Fusiliers.
G. A. Baker	Hampshire Regiment.
M. J. Barnett	New Zealand E. F.
J. H. Beale	Notts and Derby Regiment.
S. W. M. Braggins (Lieut.).	Worcestershire Regiment.
T. F. Chipp (Captain)	Middlesex Regiment.
S. G. Cobbold	Rifle Brigade.
H. Cowley	London Rangers.
G. Douglas	Scottish Horse.
A. E. Duley	Somerset Light Infantry.
W. Dunk	Royal West Kent Regiment.
H. Eavis	Royal West Kent Regiment.
G. F. Gardiner	Royal Naval Brigade.
F. Glover	Royal West Kent Regiment.
W. J. Goodrich	South African E. F.
G. C. Johnson	Civil Service Rifles.
R. Kett	Queen's Westminsters.
A. G. King	Royal Field Artillery.
H. G. King	County of London Regiment.
D. B. Kinmont	R.A.M.C.
C. A. Little	New Zealand E. F.
X. 1711	1 7 1

<sup>\*</sup> Killed in action.

	305
W. B. Little (Captain) H. B. Lloyd R. S. Lynch G. B. Mallett W. E. Marriott W. H. Morland P. V. Osborne H. A. Pettigrew (Lieut.) J. M. Purves J. Richardson F. W. Rolfe H. Ryall H. Sanders T. Sargeant J. Scott Rev. W. C. Smith (Captain) H. W. L. Southgate F. J. Stayner H. B. A. Tindall W. H. Tuck C. B. Ussher J. L. Veitch (Captain) J. C. Wallace H. M. Woolley (Lieut.) W. N. Wright	Durham Light Infantry. Rocky Mountain Rangers, Canada. University & Public Schools Corps. Gloucestershire Regiment. South African Carabineers. Royal Scots. Indian Expeditionary Force. Welsh Horse. Transport Officer, Nyasaland. Royal Field Artillery. London Sanitary Co., R.A.M.C. Australian A.M.C. R.A.M.C. Royal Flying Corps. Mechanical Transport, A.S.C. Chaplain, Australian E. F. Norfolk Regiment. South African Carabineers. Royal Field Artillery. R.A.M.C. North Irish Horse. Devonshire Regiment. Motor Cycle Section, R.E. Essex Regiment. Mechanical Transport, A.S.C.
C. H. Anderson A. G. Bailey (Lieut.) A. F. Baker J. C. Beswick C. Boff F. B. Butler G. Chambers P. Chandler H. L. R. Chapman W. Clark W. Collins G. Corbett C. V. Crowe J. W. M. Cunningham J. Divers G. Ferries W. F. Godfrey H. Green F. B. Grinham G. Grout	Royal Garrison Artillery.  R.A.M.C.  Artists' Rifles.  Royal Fusiliers.  R.A.M.C.  Royal Engineers.  Civil Service Rifles.  Queen's Westminsters.  Royal Marine Artillery.  King's Royal Rifles.  Cameron Highlanders.  Royal Field Artillery.  County of London Cyclists.  R.A.M.C.  Civil Service Rifles.  Royal Field Artillery.  Middlesex Regiment.  King's Royal Rifles.
F. W. Hall	R.A.M.C.

<sup>\*</sup> Killed in action.

F. G. Harcourt	R.A.M.C.
R. R. Hayes	Sussex Regiment.
C. Hazel	R.A.M.C.
G. Hillier	R.A.M.C.
P. C. E. Jackson (Lieut.)	Lincolnshire Regiment.
A. Keys	R.A.M.C.
A. J. Little	Royal Naval Reserve.
*H. J. Longhurst	King's Royal Rifles.
C. Matthews	Middlesex Regiment.
A. J. Meads	Queen's Westminsters.
A. B. Melles	Royal Garrison Artillery.
S. H. Miles	Queen's Westminsters.
F. A. Newman	Royal Field Artillery.
G. T. Philpott	East Surrey Regiment.
Charles P. Raffill	Royal Fusiliers.
L. P. Richardson	East Surrey Regiment.
F. M. Rogers	Civil Service Rifles.
E. Ruck	East Surrey Regiment.
H. Ruck	Royal Field Artillery.
M. B. Scott	3rd Battalion, East Surrey Regt.
J. Sparrow	East Surrey Regiment.
W. B. Turrill	Sanitary Corps R.A.M.C.
M. Vardy	Queen's Westminsters.
W. N. A. Ward	Queen's Westminsters.
E. Yuill	R.A.M.C.
Gangers, Constables	AND LABOURERS
The following men have enlisted	•
oublished:—	and the common for 1919 was

C. Bacon	Royal Horse Artillery.
G. Brennen	Middlesex Regiment.
G. Burgess	Middlesex Regiment.
E. R. Collins	Middlesex Regiment.
A. J. Fletcher	Surrey National Reserve.
A. J. Hill	Middlesex Regiment.
F. Hunt	Middlesex Regiment.
J. A. Mingay	Army Ordnance Corps.
R. Palmer	Army Service Corps.
H. Parker	Army Service Corps.
J. Priest	Middlesex Regiment.
F. W. Prince	Royal Engineers.
J. Sealey	Army Ordnance Corps.
W. J. Skelly	Army Ordnance Corps.
E. J. Stevens	Middlesex Regiment.
H. Topping	Army Service Corps.
W. Wood	East Surrey Regiment.

<sup>\*</sup> Killed in action.

## IN MEMORIAM.

#### CHARLES FREDERICK BALL.

The sad news of Mr. Ball's death, in action, came as a great shock to everyone at Glasnevin. In his position as Assistant to the Keeper he came into contact, more or less, with every member of the Staff, and was universally liked and respected. His unfailing courtesy endeared him to everyone, and a large circle of friends in Ireland mourn his loss to-day and will not soon forget him.

I first met Mr. Ball at Kew nearly fifteen years ago. He had been at Kew about a year, and was then, as far as I remember, working in the Temperate House. Although we did not work in the same department, I was often associated with him on the cricket field, and in botanical rambles no one was more generally liked at Kew than Ball.

Born in 1879. Mr. Ball worked in his youth for several years in Messrs. Barron's Nursery, Elvaston, Derby, and subsequently was employed in Barr's Nurseries at Surbiton. From there he entered Kew in July 1900, where his abilities were soon recognised, resulting in promotion as sub-foreman in the Herbaceous and Alpine Department. Leaving Kew in 1903, he joined his brother in a market garden at Nottingham, but found the business insufficient to support two, so returned to Kew for a few months. In December 1906, just about ten years ago, Mr. Ball was appointed foreman in the Royal Botanic Gardens, Glasnevin, and seven months later Assistant to the Keeper, on passing the necessary examination.

Although an exceedingly good all-round plantsman, our late friend had a special predilection for Alpines, and generally spent his annual leave collecting and studying the gems of the Swiss Alps and northern Italy. In 1911 he visited Bulgaria on the invitation of the O'Mahony, and obtained permission for a fellow Kewite, Mr. Herbert Cowley, to accompany him. Many of Mr. Ball's photographs, taken in Bulgaria, have appeared in the horticultural press, and the wonderful collection of Haberleas which he sent home has increased in beauty at Glasnevin, and evoked much admiration. Even while on active service in Gallipoli his love of collecting persisted, and numerous seedlings are growing on at Glasnevin from seeds he sent home, gathered in the vicinity of Suvla Bay. A fine all-round athlete, he knew no fear, and one of his comrades, invalided home, recounted to a friend that the last he saw of Mr. Ball he was lying behind a big boulder digging up "weeds" with Turkish bullets spitting all around him.

Alas! that we shall see him no more, but to all who knew him intimately his memory will remain green for many years to come, the while he sleeps peacefully on the shores of Suvla Bay "in the grave where his comrades laid him."

Mr. Ball enlisted in the 17th Royal Dublin Fusiliers ("Pals'" Battalion) soon after the outbreak of war, and was married as recently as December 16, 1914. He was Editor of *Irish Gardening*, and a

member of the Kew Guild Committee. Mr. Ball was interested in plant-breeding, and several of his hybrids, including *Calceolaria Ballii*, have received favourable commendation.—J. W. B.

#### WALTER H. MORLAND.

Kewites in the past have fought unflinchingly the deadly ravages of sickness and disease in many parts of the Empire. Now, in our country's hour of need, we find them just as ready to take up arms in defence of their hearth and home. Soon after war broke out, on August 31, 1914, Mr. Morland enlisted in the 5th Battalion of the Royal Scots, training assiduously at Edinburgh until March 19, when the regiment embarked for the Dardanelles, via Egypt. We had a cheery letter from him a day or two previously, full of hope, and a promise to write his experiences for the Journal. But alas! in less than two months our comrade had fallen. He got safely through the terrible landing on April 25, but did not return from a desperate assault on a wood below Krithia on May 7. For three weeks no traces of him could be found, and it was supposed he had been taken prisoner; then his chums, during an advance, found his body. Mr. W. H. Morland was the first of our members to fall in the service of his King and Country. Such is the price of Empire. To his widow and parents the sympathy of every "Guilder" will be extended.

Mr. Morland was born at Maidstone in 1881. He was apprenticed in the nursery of Messrs. George Bunyard & Co. in that town, and then worked at the Botanic Garden, Cambridge, before coming to Kew in April 1905. A quiet conscientious worker, he made many friends and took an active part in the "Mutual" debates, reading a paper on Aquatic plants. Leaving Kew in March 1907, Mr. Morland went to Messrs. Thomas Rochford & Sons, then followed a brief spell in Hyde Park previous to going to the Edinburgh Botanic Gardens in 1909, where he was working in the rock garden when war broke out.

## HENRY JAMES LONGHURST.

Mr. Longhurst is the first of our young gardeners to give his life for his country in this war. He entered Kew in July 1913, working successively in the Temperate House and Flower Garden Departments. Our fallen friend enlisted in the 2nd Battalion of the King's Royal Rifles on November 21, 1914, and was killed in action "Somewhere in France" on September 25, 1915. Mr. Longhurst was 23 years old, having been born on February 3, 1892. Previous to coming to Kew he worked in the gardens of Murrey's Court, Ashstead, and "The Lodge," Effingham, Surrey. To his parents, members of the Guild will extend their sympathy in the loss of a young life so full of promise.

Another work by Mr. Woodrow, "The Mango, its Culture and Varieties," was published at Paisley in 1904. He contributed a number of interesting papers on the botany of the Bombay Presidency to the Records of the Botanical Survey of India, and the results of a long study by him of the flora of Western India were published in eight parts in the Journal of the Bombay Natural History Society between 1897 and 1901. In the preface to the "Flora of the Presidency of Bombay," prepared at Kew by the late Dr. T. Cooke, generous testimony is borne to the excellence of Mr. Woodrow's botanical work. Similar testimony has been recorded by the late Sir George King in the "Reports of the Botanical Survey of India" from 1893 onwards. The Journal for 1905 contains an interesting story from his pen entitled "An Episode in Indian Life."

Mr. Woodrow was a man of sterling worth, the soundness of whose judgment was only exceeded by the absence of assumption which characterised his manner.—D. P.

# FRANK WIDOUS ASHTON.

Many Kewites, past and present, will learn with deep regret of the death of Mr. Frank Ashton, who for many years past was a conspicuous personality in the Orchid world. He was born at Barnage, near Manchester, in 1860, and when only 11 years old was apprenticed to Mr. W. Young, "Highfield," Heaton Mersey. West Bank House, a neighbouring establishment, "The Dales," Whitefield, Manchester, and Duncalf's Nursery, Macclesfield, were places in which he worked previous to entering Kew on June 13, 1880, at the age of 20, with nine years' practical experience. The love of Orchids had apparently been simmering all the time in our late friend's breast, for on March 13, 1882, he was advanced to the position of sub-foreman in the Orchid Department.

Although he could have taken up a Colonial appointment, Mr. Ashton preferred to stick to the Orchid trade. Thus we find him, on leaving Kew in May 1885, appointed as Orchid-grower to Mr. J. R. Wood of Barvin's Park, near Potter's Bar. After a few years in this place, Mr. Ashton went North again, and became foreman in the Liverpool Horticultural Company's establishment at Garston, a position which he held for about three years, until he took up a similar position, with an occasional spell of travelling, for Messrs. Charlesworth, Shuttleworth & Co., of Bradford, Yorks. His next move was as manager to Messrs. Davis & Co., Southgate, a firm in which, on its dissolution, he became a partner with Mr. Stanley Mobbs in 1898. Seven years later he severed this connection, and became the travelling representative of Messrs. Hugh Low & Co., Bush Hill Park, Enfield, a position which he retained until 1911, when he commenced business on his own account as a horticultural commission agent.

Unfortunately for Mr. Ashton, his health began to break up about 16 years ago, when he ran a rusty nail into his big toe at the Liverpool Docks. To make matters worse, he had the misfortune to lose the sight of his left eye as the result of a severe attack of influenza, and, as time went on, what with business worries and one thing and another, the poor fellow at last became very tottery and broken down—so much so, indeed, that he was compelled to enter the Great Northern Hospital for an operation. Locomotor ataxy, spinal and bladder troubles, however, had set in and had taken too strong a hold on his constitution, and after a fortnight's agony he passed away at the age of 55.

Ashton was loved by all who knew him well as a genial boon companion, and he was never tired of speaking of the happy times he spent at Kew. He was generous to a fault, and when he had plenty he spent and gave freely, if unwisely, and his end was saddened by the feeling that he had lost practically everything. The War put the final touch to his business affairs; but it is only fair to say that, prior to this, a few friends in the Orchid community, headed by the Kew Guild, subscribed something over £50 for his benefit. Sic transit gloria mundi!

Ashton leaves a widow and two sons, one of whom is serving his country in the Royal West Kent Regiment. The other is nobly helping his mother as well as he can. But that help has meant that a grant made from the Prince of Wales's Fund for a short time is no longer available, so that Mrs. Ashton is unfortunately left in straitened circumstances at the present time, and, owing to an accident some years ago, is unable to earn very much by her own efforts.—J. W.

#### FREDERICK WILLIAM HARVEY.

The death of our well-known friend Mr. F. W. Harvey, which occurred in August last after a short and painful illness, came as a sudden shock, from which we have not yet recovered. His passing at the early age of 33 years is greatly to be deplored, for he was a sincere and loveable man, just entering upon what bid fair to be a career of great usefulness.

A native of Stebbing, a rural village in Essex, he was for four years previous to entering Kew in the County Gardens, Chelmsford, first a student and then under-gardener. While at Kew Mr. Harvey was a keen student in the practical work of the garden and in the lecture-room. He took a keen interest in the Mutual Improvement Society, reading a paper and taking an active part in the debates.

Our late friend left Kew in July 1905 to take up the appointment as sub-editor of *The Gardener*. Later he worked in a similar capacity on *The Garden*, and, on the resignation of the late Mr. E. T. Cook, he became Editor. Under Mr. Harvey's careful editorship, *The Garden* more than maintained the very high standard of excellence that has characterised this publication from its earliest issues. He was the

author of "Fruit-Growing for Beginners," and edited "The Hardy Flower Book," "The Small Rock-Garden," and "Gardening for Beginners." He was a member of the Committee of the Kew Guild, the Floral Committee of the Royal Horticultural Society, a member of the Council of the National Rose Society, and Chairman of the National Sweet Pea Society in 1914.

Mr. Harvey had a great love for his home and for his native county. From the time that he left Kew until his death he resided in the Essex town of Romford. The following are extracts from a leader in the local press:—"He was greatly interested in the local government of the town." "Horticulture was work and pleasure to him, and summer evenings invariably found him in his charming little garden. He was never so happy as when chatting with friends on his favourite topic. His decease is a distinct loss to the town and the horticultural world in which he lived." To his widow and little son we extend our deep and heartfelt sympathy in their sad bereavement.

Amid every token of respect, his body was laid to rest in Romford Cemetery on the afternoon of September 4. Among his Kew friends who gathered round the grave were Messrs. A. C. Bartlett, C. H. Curtis, W. Dallimore, A. Osborn, W. H. Young, and Corporal Cowley. There were many beautiful floral tributes, including a large wreath of our late friend's favourite flower, the Rose, "With sincere regret and affectionate regard from members of the Kew Guild."—H. C.

# WILLIAM GRANGER.

With the death of Mr. William Granger at Richmond on the 12th of March, at the ripe age of 86 years, there has passed away one of the oldest and most respected members of the Guild. A portrait and sketch of Mr. Granger's career appeared in the Journal for 1896, and other particulars in 1893, the year of his retirement from the Gardens after forty-three years' service. Quoting from a recent number of the Kew Bulletin, J. R. J. writes: - " For some time a part of his duty was to check the men's time as they entered and left the Gardens. A kindlygiven word from Mr. Granger as to any slackness or irregularity was always effectual, as the men realised that such a warning was given only for their own welfare." One paragraph from the Journal for 1893 is so appropriate that no excuse is necessary for its reproduction here. "It is difficult to adequately express the feeling with which he has always been regarded by Kew men; that feeling, however, is one of deep respect and esteem—it would scarcely be too much to say of affection. Only those who have lived and worked at Kew can appreciate the peculiar position he has occupied in the establishment, and the great moral influence he exerted over the men."

Mr. Granger retired from the Gardens under the age-limit in 1893. He continued for some time to reside at Kew, but, on relinquishing the post of parish clerk after forty-three years' service, about eleven years ago, he moved to Richmond. The respect in which our latelamented friend was held by the inhabitants of Kew was shown by the large congregation at the choral funeral service in the Parish Church previous to the internment in Richmond Cemetery.

#### THOMAS CLEVERLY.

We are unable to furnish any particulars of this Old Kewite except that he died about five years ago. For some time he had been a small farmer near Colne. Mr. Cleverly left Kew in October 1874 to take up the position of head-gardener to Lady Pollock.

#### GILES BREWER.

We are informed by his widow that this Old Kewite died very suddenly at Victoria, British Columbia, in November 1912. He left Kew in March 1881. No reply has so far reached us in response to a request for a photograph and particulars for publication in the *Journal*,

### MRS. BADDERLY.

Kewites will hear with regret of the death of Mrs. Badderly. For 33 years, from the day the North Gallery was opened to the public in June 1882, she had acted as caretaker. Failing health compelled her to retire as recently as March last. Mrs. Badderly went to live at Teddington, but only lived there about two months, passing away on June 26 at the age of 67. To her husband and son we extend our sympathy and sincere regret.

#### MR. H. C. HOLBROW.

Information has reached us, through Mr. A. R. Gould, of the death of Mr. Holbrow, who left Kew in 1870. He died in 1906 or 1907, previous to the San Francisco earthquake and fire, while on his way East, death taking place on the journey.

Mr. Arnold E. Duley writes under date March 19, 1915:-

"I have resigned my position in the Crimea and come home to enlist, joining the 9th Somerset Light Infantry. I hear the Kew Guild Journal for 1915 is published, but a copy did not reach me before leaving Russia, three weeks ago. Perhaps some of the articles were too revolutionary for the censor. Things were quiet in the Crimea before I left, except for a bombardment of Yalta by the 'Breslau.' I had a most interesting journey home, via Petrograd, Helsingfors, Tornea, Stockholm, Christiania, and Bergen. From the last-named place to Newcastle I travelled on a Norwegian mail-boat. We saw a submarine off the coast of Scotland, but nothing happened."

KEW GARDENS OR HYDE PARR?—A competent judge has written during the past week-end that Kew Gardens at this season are becoming almost as popular a promenade as Hyde Park. We are inclined to believe him. Before and after lunch during the last week, he goes on to say, one meets at every turn well-known leaders of society and other celebrities. One day Queen Amelia was there with a party of relatives and friends, and on another Queen Alexandra and Princess Victoria. To Queen Mary, we recall, Kew is a favourite resort. The present attraction at the Gardens is, of course, the really beautiful display of almond trees in flower and the daffodils. But Kew Gardens are everlastingly beautiful from spring to autumn. Few of us have forgotten the day when first we saw the rhododendrons in full bloom.—From the Thames Valley Times, April 7, 1915.

## WOMEN GARDENERS AT KEW

Name.	Where trained.
Bell, V. S	Glynde School of Gardening.
Champion, D. M	Swanley Horticultural College.
Clare, J	Miss Spilsbury.
Davies, R. A	Horticultural College, Hounslow.
Goad, M	Henfield, Sussex.
Grant, N	Thatcham Fruit and Flower Farm.
Hawley, D. M	Ivybridge School of Gardening.
Hutchings, A	George Cadbury, Esq.
Jacobs, A	Ensbury Growers.
Joshua, L. H	Swanley Horticultural College.
Lines, I. L	Miss Lister, Park Gate, Cheshire.
Lockhart, T. A. M	Holloway College, Botanical Garden.
Macintyre, M	Swanley Horticultural College.
Macleod, F	Whinbrae Ben Rhydding.
Merryweather, M. E	Swanley Horticultural College.
Owen, N	Bedford College.
Phillips, E. M. C.	Studley Horticultural College.
Ridges, K. M	University College, Reading.
Stubington, E. M	Swanley Horticultural College.
Taylor, D. B	Swanley Horticultural College.
Watson, C. M. W	Swanley Horticultural College.
Williams, R	Thatcham Fruit and Flower Farm.
Yencken, A	University College, Reading.
Yeo, M. L	University College, Reading.

# KEW STAFF (December 31, 1915).

	, a second and the first	
(The names of Life-mem	bers are preceded by an asterisk.)	Entered Kew.
Director*LtCol. Sir D	avid Prain, I.M.S., C.M.G., C.I.E.,	
	.H., M.B., etc.	1905
	ill, M.A., F.L.S	
Assistant, 1st Class	John Aikman	
0.1	*William Nicholls Winn	1890†
/m 1 1 1	*Dr. B. Daydon Jackson, F.L.S	1900
Keeper of Herbarium and Library.	Otto Stapf, Ph.D., F.R.S., F.L.S.	1891
Assistant, 1st Class	Charles Henry Wright, A.L.S	1884
	Robert Allen Rolfe, A.L.S	1879†
Assistant, 2nd Class	*Sidney Alfred Skan	1892†
,	T. A. Sprague, B.Sc., F.L.S.	1899
"	Miss Elsie Maud Wakefield, F.L.S.	
<i>"</i>	Munro B. Scott, M.A., B.Sc	1914
	William B. Turrill, B.Sc	1909
for India		1904+
" for India	John Hutchinson	
" for Tropical Africa	Company and the same Statement of the company of th	
Botanical Artist	Frederick Flippance	1913†
		1878
Lecturer (Physics & Chemistry)	Paul Haas, D.Sc.	1909
" (Soils and Manures)	H. B. Hutchinson, Ph.D.	1914
Sub-Assistant	Miss Ada F. Fitch	
,,	Miss Jessie Mash	1913
Assistant (Temporary Technical)	Miss M. O'Reilly	1915
,, ,, ,, ,,	Miss D. M. Rolfe	1915
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Miss E. Stubbington	1915
Assist. Keeper (Jodrell Laboratory)	Leonard Alfred Boodle, F.L.S	
Keeper of Museums	John Masters Hillier	1879
Assistant, 2nd Class	*John Henry Holland, F.L.S	1895†
" "	*William Dallimore	1891†
Preparer		1880
" (Temporary)	L. J. Harding	1913
Plant Pathology Laboratory:-		3004
Assistant, 1st Class		1904
,, ,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
" (Temporary Technical).		
,, ,, ,, ,, ,,	Miss M. G. Aikman	
Curator of the Gardens		
Assistant Curator	*William Jackson Bean	1883†
Foremen:—		
Herbaceous Department		
Arboretum		
Decorative Department		
Tropical Department		
Temperate House	*William L. Lavender	1899†

Storekeeper	*George Dear	1884
Sergeant-Constable	Charles George Norris	1896
Clerk of the Works	G. D. Patterson	1911
" Foreman	J. E. Holman	1912
	*L. C. Burrell, M.B., M.A., B.C	

# SUB-FOREMEN.

Name.	Department.	Entered Kew	. Previous Situation.
Clark, J	Arboretum	Oct. 1914	J. Waterer, Sons & Crisp, Bagshot.
Hibbins, W.R	Propagating Pits	May 1913	Hutton Hall, Gainsboro'.
Clark, W	Decorative (Indoor)	Jan. 1913	Torre Abbey, Torquay.
Merryweather,	Herbaceous	June 1915	Manor House, Northfield.
Miss E. M.			
Taylor, Miss D	Decorative(Outdoor	June 1915	St. George's Wood,
•			Haslemere.
Bintner, J	Temp. Ho. Pits	Nov. 1913	Farm Nursery, Hampton.
Smith, E	Ferneries	Feb. 1915	Gayhurst, Newport Pag-
,			nell.
Fletcher, E	Palm House	Nov. 1914	Blanefield, Oakleigh Park,
,			S.
Chollet, P	Orchids	Feb. 1915	Heincke Nurseries,
,			Bremen.
Coates, C. F	Temperate House	Sept. 1915	Manor Park, Potton, Beds.

# GARDENERS.

Name.	Entered Kew.	Previous Situation.
Baley, P	July 1915	G. Caspari & Co.
Beer, A	June 1914	Amos Perry, Enfield.
Bowley, A	Sept. 1914	Grove Park, Chiswick.
Brown, C. H	Sept. 1914	Court Close, Eckington.
Burch, W	Dec. 1914	J. Carter & Co., Forest Hill.
Buyssens, P	Dec. 1914	Horticultural School, Vilvorde.
Chandler, P	Aug, 1914.,	Hursley Park, Winchester.
Godfrey, W. F	July 1915	Richmond & Sons, Feltham.
Haspels, D	Sept. 1915	J. Klinkert, Richmond.
Hansen, C. B	Sept. 1915	Waltham Abbey, Herts.
Meili, K,	Sept. 1914	Amos Perry, Enfield.
Rogers, F. M	Mar. 1915	Ratton Gardens, Willingdon, East-
		bourne.
Weeks, C	Dec. 1914	J. Veitch & Sons, Ltd., Feltham.
Winn, J	Oct. 1913	Kew trained.

# OLD KEWITES.

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

	(The number of	, 29	7700770	ur o presente e grande e a constante e
	Name.	Left	Kew.	Present Position and Address †.
0	*Abbott, James M		1898	83 High St. South, Rushden, Northants.
	Adams, R		1903	St. Joseph's Hospital, Burlington Lane,
	24dams, 16	Trpitt	1000	Chiswick.
	Adamson John	Tuly	1909	H. G., Pen Moel, Chepstow.
	Adamson, John		1888	Supt., Public Gdns., Bermondsey, S.E.
	Aggett, Walter H		1899	John Innes Hort. Inst., Merton, Surrey.
	*Allard, Edgar		1904	Curator & Economic Botanist, Port
	*Allen, C. E. F	Len.	1001	Darwin, N. Territory, Australia.
	Allen Territor	Man	1011	York Lodge, Upper Parkstone, Dorset.
	Allen, Justin	Jan.	1911 1911	Columbia University, New York City,
	*Allt, W. S	Jan.	1911	U.S.A.
	# A 7 T	Oat	1005	
	*Anderson, J	Oct.	1905	c/o The Bai Rubber & Cocoa Estates, Ltd.,
				Bai Plantation, Roi de Rey, Cameroons,
	* 1 7 777	т	1010	W. Africa.
	*Anderson, J. W		1910	Asst. Curator, Botanic Garden, Singapore.
	Archer, Sydney		1895	Orkney Cottage, Taplow, Bucks.
	*Arden, Stanley, F.L.S		1900	27 Churchill Rd., Boscombe.
	*Armbrecht, Otto		1898	Derneburg, Prov. Hanover, Germany.
	Armstrong, James		1893	H.G., The Moorings, Marion, Mass., U.S.A.
	*Armstrong, Robert		1897	170 Bartlett Av., Toronto, Ontario, Canada.
	*Arnold, George		1894	Priorswood, Santry, Co. Dublin.
	*Arthur, Alec		1899	The Homestead, Genesco, N.Y.
	Ashlee, T. R		1 1910	Kerrisdale P.O., British Columbia.
	Astley, James		1898.	TO A A TO THE TOTAL DATE OF A
	Attenborough, F		1896	H.G., Annesley Ho., Villa Rd., Nottingham.
	*Aubrey, A. E		1 1910	2 Raby Terrace, Neston, Chester.
	Augull, Karl		1902	Maj Nursery, Nowotscherkask, Russia.
	*Auton, William J		1897	H. G., Pyrford Court, Woking.
	Avins, Charles W	Oct.	1894.	
		4	1000	Comt Toi & Cont Conlana A India
	*Badgery, R		1906	Supt., Taj & Govt. Gardens, Agra, India.
	Baggesen, Niels	Dec.		Birchden, Groombridge, Sussex.
	Baggs, A. E	Apr.		
	Bailey, Thomas		. 1892	
	Baker, G. A.	Jan.		9 Beverley Road, Chiswick, W.
	Baker, John Gilbert,	Jan.	1899	3 Cumberland Road, Kew.
	F.R.S., F.L.S., V.M.H.	Dog	1997	Curatan Rat Gardona Orford
	Baker, William G		1887 $1909$	Curator, Bot. Gardens, Oxford.
	Bale, J. H	Oct.	1908	Carnbrae, Abbotsham, near Bideford.
	*Band, R	Oct.	1000	4 Leighton Crescent, Brecknock Road, N.W.
	Danles C. II	Man	1906	and the state of t
	Banks, G. H		1884	21
	*Barker, Michael		il 1914	Kahanui, N. Otago, N. Zealand.
	Barnett, M. J.	May	1898	Landscape Gardener, 52 Forest Road,
	*Bartlett, A. C	May	1000	Kew; and 74 St. John's Road, Isleworth.
	Dolont Dohont	Tune	e 1890.	new, and 14 St. John's Road, Isleworth.
	Barton, Robert		. 1899	The Gardens, Sunnylands, Dallington,
	Bass, Edward	mai	. 1000 .	Northampton.
	Daga Thomas	Mar	. 1899	
	Bass, Thomas		1904 .	
	*Bates, G	100.	1001.	Herts.
	Batters, Frederick H	Feb	. 1891.	c/o Messrs. Cutbush, Nurserymen, High-
	Datters, Frederick II	100		gate, N.
	Baum, Jacob	July	7 1900 .	
	*Baumann, Ludwig		. 1902 .	. 1366 Lucretia Ave., St. Louis, Mo., U.S.A.
	Baumgardt, Hilding	Mar		20.011.
	Beale, J. H	Apr	2011	. 32 Lumley Road, Redcar, Yorks.
	Beatty, E. J.	Nov		. Messrs. Wallace & Co., Colchester.
	Deatry, D			
	1 111 Linna II C	-Has	od Gandon	er · F - Foreman · N - Nunsenuman · M C -

<sup>†</sup> Abbreviations: H. G.=Head Gardener; F.=Foreman; N.=Nurseryman; M.G.=Market Gardener.