

WILLIAM JACKSON BEAN.

IN dedicating the twenty-first issue of our *Journal* to Mr. W. J. BEAN, we pay a well-deserved compliment to one who is well known to all our readers. For over thirty years Mr. Bean has worked at Kew, the last fourteen years in the capacity of Assistant Curator.

Mr. Bean was born at Leavening, a village at the foot of the Yorkshire Wolds, near Malton, on May 26, 1863. His father and two generations before him were nurserymen. He was educated at Holgate School, York, and his deep interest in horticulture dates from the time of his boyhood. At the age of sixteen he went to the famous gardens at Belvoir Castle, and in 1883 he entered Kew. His first promotion at Kew was to the post of sub-foreman in the Palm House, and he afterwards held a similar position in the Orchid Department. Later on he became foreman, first in the Temperate House, afterwards in the Arboretum. In February of 1900 Mr. Bean was appointed Assistant Curator.

It is with the Arboretum that Mr. Bean's work is inseparably associated. He has seen it practically replanted, and it may be said, without fear of contradiction, that there is no collection of trees and shrubs to equal it in any other garden of the world. Mr. Bean is a member of the Floral Committee of the Royal Horticultural Society, and is well known as a writer on horticultural subjects. He is the author of a descriptive and historical book entitled 'Royal Botanic Gardens, Kew,' published by Cassell & Co. At the present time he is engaged on a work entitled 'Trees and Shrubs hardy in the British Isles,' 2 vols. This is now in the press, and is expected to be published about March of this year. In recent years Mr. Bean has travelled widely. His journeys include Germany and Austria (1908), United States (1910), Italy and Dalmatia (1912).

It would be remiss on our part were we not to mention the deep interest Mr. Bean has shown in the affairs of the Kew Guild. He was Treasurer from the commencement to 1908. For five years he was Editor of this *Journal*, while his unflinching interest in all that concerns the well-being of Kew has earned the admiration and respect of all with whom he has been brought in contact.

At one time he was captain of the cricket club, but in later years his recreation has been divided between golf and lawn-tennis.

His quiet and unassuming methods are characteristic of the man, and his modesty forbids our indulging in anything of the nature of an eulogium.

ANNUAL REPORT.

(1912-1913.)

The Committee have pleasure in submitting their Report for the year ending April 30th, 1913.

The affairs of the Guild are generally satisfactory, and for the past year the Receipts exceed the Expenditure.

The receipts for the year amounted to £61 19s. 3½*d.* including 15 life subscriptions. The total number of Life Members is now 297. The expenditure for the year amounted to £52 0s. 3*d.*

It is with regret that the Committee again bring to the notice of Members the serious falling-off of Annual Subscriptions among old Kewites, notwithstanding that the *Journal* has been forwarded to them. There are 220 defaulters on the last issue of the *Journal*. This means a loss of income which is obviously unfair to regular subscribers, and tends to make it difficult for the Committee to meet the expenses of the Guild.

The Committee desire to impress upon Members the need for communications suitable for the *Journal*, and the Secretary will be glad to receive notice of any changes of address in order to keep the directory as complete as possible.

The Annual General Meeting was held at the Holborn Restaurant, Mr. R. Hooper Pearson being in the Chair. In accordance with the resolution passed at the meeting, the Committee commend to the notice of Members the proposed alteration of rules, copies of which were distributed with the last issue of the *Journal*.

The Annual General Meeting was followed by a Dinner, when the Director presided over a large attendance. Arrangements have been made for the Dinner 1913 to be held at the Holborn Restaurant as in former years, and Mr. W. Goldring has kindly consented to preside and to be President for the ensuing year.

The Members of Committee who retire this year are Messrs. W. Hales, A. Garnett, G. W. Butcher, and S. J. Normanton. The Committee recommend the re-election of Messrs. Hales and Garnett, and that Messrs. H. W. L. Southgate and H. B. Sharpe be elected to replace Messrs. Butcher and Normanton respectively.

Messrs. C. H. Curtis and A. Osborn are recommended as Auditors for the ensuing year.

The Committee regret to have to report the deaths of the following Members:—H. J. Baker, Henry Bevan, Harry Dodd, Sydney Hutchings, S. Kuffel, and W. R. Smith.

The Committee invite Members to inform the Secretary should they be in need of employment or if they know of situations which Kew-trained men might fill.

The Benevolent Fund continues to make steady progress and to increase in usefulness. An account, separate from the Guild funds, has been opened, and £8 8s. 0d. has been subscribed in the past year. Since the publication of the last report a further grant of £5 has been made from this Fund to a Member of the Guild in need of assistance.

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

Balance Sheet, 1912-1913.

<i>Receipts.</i>		<i>Expenditure.</i>	
	£ s. d.		£ s. d.
Balance from 1911-12	27 4 6	Journal Printing A/c.	35 12 0
Life Subscriptions	15 18 5	Postage and Carriage	6 10 10
Annual Subscriptions and Sales.....	13 2 1½	Binding	0 1 9
Interest on £300 New South Wales Stock.....	9 17 10	Printing and Stationery ...	0 15 8
Interest on Post Office Savings Bank A/c.	0 18 5	Secretary and Editor's Honorarium	10 0 0
Advertisements in 1911-12 Journal	3 10 0	Balance	36 3 6½
Advertisements in Journal...	17 10 0		
Balance from Dinner A/c....	1 2 6		
Total	£89 3 9½		£89 3 9½

Capital Account.

* £300 New South Wales 3½% Stock, including Thomson Bequest.....	300 0 0
Deposit in Post Office Savings Bank	27 1 6
Cash in hand	9 2 0½
	£336 3 6½

* New South Wales 3½% Stock is redeemable at par but now stands at 94% = £282, and was purchased for £315.

Benevolent Fund.

<i>Receipts.</i>		<i>Expenditure.</i>	
	£ s. d.		£ s. d.
Balance from 1911-1912.....	3 8 0	Grant to Mr. Frank Ashton .	5 0 0
Subscriptions	8 8 0	Frank Ashton Fund	8 7 0
Frank Ashton Fund	8 7 0	Balance	6 16 0
	£20 3 0		£20 3 0

Compared with vouchers, bank book, stock receipt, &c., and found correct, May 13th, 1913.

J. COURTS, *Treasurer.*
H. COWLEY, *Secretary.*

GEO. DEAR,
CHAS. H. CURTIS, } *Auditors.*

THE DINNER.

MR. WM. GOLDRING, in proposing the toast of "The Kew Guild," touched very briefly upon the origin of the Guild. He described it now as a strong and healthy body. "May it be handed down to future generations of Kewites who will, let us hope, not think ill of us," said Mr. Goldring. Continuing, he said that the silent bond of the Guild was the *Journal*, which increased in interest every year. Letters came from abroad, frank, plain, and ungarnished copies of the writers' experiences. We are proud of the traditions of Kew. The public generally, and gardeners especially, value Kew. Mr. Goldring related a recent experience in the Western Highlands, where he met a typical old Scottish gardener. Enquiring if he had been to Kew, the Chairman was told "Hoots, aye, mon! an' it's the finest gairden in the whole wurrid," a statement he did not dispute. Mr. Goldring also dwelt upon the educational advantages of Kew. Proceeding, he said, "I am conscious that eloquence is not my strong point. I can make gardens and cultivate flowers, or, rather, I can tell other people how to make them, which is a little different and perhaps a little easier." (Laughter.) The names of E. Brown (Uganda) and H. F. Macmillan (Ceylon) were coupled with the toast.

MR. E. BROWN said he well remembered his first Kew Dinner in 1902. The Dinner was a happy Institution for Old Kewites in far-off countries, and was an integral part of the constitution of the Guild. He was glad this was so. Looking round the room, one could see the influence of Kew gardeners in botany, agriculture, and horticulture. The botanists, writers, and gardeners were a combined influence of immense power—a combination to be found in no other company. Some members of the Guild thought it a waste of influence to limit the activities of the Guild to a Dinner only. More could be done by the Guild with no loss of dignity. There are certain questions which demand investigation. Speaking of the work of Kew men abroad, Mr. Brown said that in 1902 the first coconut and Para-rubber plants were sent to Uganda from Kew. They were planted and looked after by a Kew man. At the present time there are 20,000 acres in cultivation, and another 20,000 acres would also be in cultivation in the course of a year. Recently the Uganda Planters' Association gave a Dinner in honour of Mr. Dawe, to whom that association owed its origin. Mr. Dawe's skill alone rendered the Association possible. "Kew also helps the planters in their troubles," said Mr. Brown, who instanced as an example the recent trouble over the coffee-leaf disease, which baffled all in Uganda, but the difficulty had been solved by sending specimens to Kew. Uganda is now going ahead faster than the older planting-colonies. The reputation of Kew men out there is excellent. Four Old Kewites are at present quartered there, and the Director has been asked to recommend six more. The speaker deplored

the tendency of Colonial governments to fill posts with college-trained men, for it cannot be said that Kew men are incapable. Unless something is done quickly, there will be no government post in the Colonies open to Kew men except merely subordinate posts. He thought the Guild could well take this matter up. Another thing the Guild might do is to advocate a course of Tropical agriculture for the young gardeners in Kew, and picked men home on leave could deliver lectures on the subject. Concluding, Mr. Brown said there are many good openings for gardeners in the plantations.

Mr. MACMILLAN also spoke on the position of Kewites in the Colonies. In Ceylon they were losing ground. His own predecessor applied to his government for increased pay, and was met with a refusal. He is now one of the wealthiest planters in Ceylon. He was, doubtful, however, if by agitation the Guild would be taking the best course to assist its good name.

Mr. C. H. CURTIS proposed the toast of "The President," and in the course of a witty speech supplemented Mr. Goldring's remarks about the men of Kew. He emphasised that, in future, when man appears in the laws of the Guild, man shall embrace woman. "We are proud of our Chairman," said Mr. Curtis. "In honouring you we honour ourselves." The Chairman's good qualities were lauded, but not unduly so; and his experiences in India, at St. Louis, and other places were recalled by the speaker. As a suggestion to the President for the ensuing year, Mr. Curtis referred to the greater advantages Kew might offer to its present men. He said the President might suggest some outlines to the Board of Agriculture of a revised course of lectures. An advisory committee might be formed composed of Old Kewites and also some present Kewites.

The toast was drunk with musical honours.

In his reply the PRESIDENT expressed his thanks. He counselled the young men of Kew to perfect themselves in every possible way. Alluding modestly to his own success, Mr. Goldring largely attributed this to Kew. In regard to the suggestion of Mr. Curtis, Mr. Goldring diplomatically said that he must ask for notice of that question.

The following were present:—

W. Goldring (<i>President</i>).	Besant, W. D.	Crouch, G. S.
W. J. Bean (<i>Vice-President</i>).	Beswick, J. C.	Cundy, C.
W. B. Hemsley (<i>Vice-President</i>).	Braybon, E. A.	Curtis, C. H.
A. W. Hill (<i>Chairman of Committee</i>).	Braggins, S.	Dallimore, W.
J. R. Jackson (<i>Guest</i>).	Brook, E.	Dancey (<i>Pianist</i>).
E. Tufnail (<i>Guest</i>).	Brown, E.	Davis, C.
Adamson, J.	Bullock, T. G.	Dear, G.
Allard, E. J.	Candler, T. H.	Dümmer, R. A.
Anderson, J.	Christie, J. S.	Dunn, C. H.
Badderly, G.	Culham, A. B.	Ellis, J.
Bates, G.	Clark, Miss J. J.	Farries, G.
Beale, J. H.	Comer, S. G.	Foden, W.
	Cope, Miss G.	Glover, F.
	Coutts, J.	Hackett, W.
	Cowley, H.	Hales, W.

Harding, C.	Macmillan, H. F.	Skane, S. A.
Harvey, F. W.	Marks, J. T.	Snowden, J. D.
Harwood, A.	Maynard, A. W.	Spooner, H.
Hauser, E.	Meads, A. J.	Symons, A.
Hillier, J. M.	Miles, A. C.	Taylor, W.
Irving, W.	Milsum, J. N.	Tindall, H. B. A.
Johnson, G. C.	Murray, J. G.	Varacek, F.
Jones, J. D.	Osborn, A.	Wakely, C.
Judd, W. H.	Osborne, P. V.	Wallace, J. C.
Kennedy, W. A.	Parsons, T. H.	Walsh, C. S.
Keys, A.	Patterson, G. D.	Walsingham, F. G.
Klaaborg, J.	Pearson, R. H.	Weathers, J.
Lowe, R. D.	Philp, F. J.	Weathers, P.
Lynch, R. I.	Powell, Miss E. M.	Williams, R. O.
Lynch, R. S.	Raffill, C. P.	Winn, W. N.
Mack, F. C.	Rolfe, R. A.	Young, W. H.

THE MUTUAL IMPROVEMENT SOCIETY.

SESSION 1912-13.

It is gratifying to report that this Session shows a marked improvement on that of last year. There have been 22 Meetings, which is 6 less than the previous Session. The attendance shows a higher average, being 35·6, while that of last year was 30·5.

As will be seen from the accompanying Syllabus, the papers have embraced a large variety of subjects, all of which have been most interesting, and have proved of great educational value to those who have taken advantage of them.

It is to be hoped that still greater interest will be shown in this Society, since the average attendance for this Session, although an improvement on that of last year, does not equal the average of 10 years ago.

The Hooker prize was awarded to M. J. Barnett.

Syllabus 1912-13.

1912.		
Oct. 7.	India	Lt.-Col. Sir D. Prain.
„ 14.	New Zealand Flora (<i>Lantern</i>)	M. J. Barnett.
„ 21.	Plant Nomenclature	G. Neville.
„ 28.	Continental Forestry	E. Richli.
Nov. 4.	Lilies (<i>Lantern</i>)	A. Osborn.
„ 11.	Parks and Open Spaces	A. W. Maynard.
„ 18.	Early Vegetables	J. Jarrett.
„ 25.	Propagation (<i>Demonstration</i>)	S. R. Candler.
Dec. 2.	West Indies (<i>Lantern</i>)	A. W. Hill, M.A.
„ 9.	Carboniferous Flora	S. J. Normanton.
„ 16.	Cucumbers, Tomatoes, and Melons ...	W. Collins.

1913.		
Jan. 6.	Plant Diseases (<i>Lantern</i>)	G. Masee.
„ 13.	Garden Designs (<i>Lantern</i>)	L. W. Gardner.
„ 20.	Hardy Fruits.....	F. Glover.
„ 27.	Alpine Plants	H. B. A. Tindall.
Feb. 3.	New Trees and Shrubs	W. Dallimore.
„ 10.	Fertilisation of Orchids	R. A. Rolfe.
„ 17.	Essex School of Horticulture (<i>Lantern</i>)	P. V. Osborne.
„ 24.	Tender Plants Outdoors in Cornwall (<i>Lantern</i>)	A. Symons.
Mar. 3.	Plant Geography (<i>Lantern</i>)	T. A. Sprague.
„ 10.	Cultivation of Roses	J. Divers.
„ 17.	Fruits under Glass	G. C. Johnson.

Chairman, J. COUTTS.

Vice-Chairman, H. W. L. SOUTHGATE.

Hon. Secretary, G. S. CROUCH.

Assist. Secretary, G. NEVILLE.

THE LECTURES, 1913.

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

15 certificates. Highest number of marks, M. J. Barnett and J. N. Milsum, 100; J. Divers and F. G. Walsingham, 99. Maximum 100.

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

21 certificates. Highest number of marks, J. C. Beswick and F. B. Grinham, 98; J. N. Milsum, H. B. Sharpe, and R. O. Williams, 96. Maximum 100.

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

15 certificates. Highest number of marks, F. G. Walsingham, 250; A. Holden and H. B. Tindall, 248. Maximum 250.

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

34 certificates. Highest number of marks, R. O. Williams, 227; G. T. Philpott, 222; W. R. Hibbins, 221. Maximum 240.

Plant Pathology. Lecturer, Mr. G. Masee, F.L.S.

18 certificates. Highest number of marks, J. C. Beswick and G. C. Johnson, 74. Maximum, 75.

British Botany Club.

1912 (Secretary, J. Ridley):—18 certificates were granted for collections.

APPOINTMENTS AND RETIREMENTS.

THE position of Superintendent at King's House Gardens, Jamaica, has been abolished, and Mr. W. J. THOMPSON, who left Kew in 1889, has been granted a well-earned pension. Mr. Thompson is now living at Bedford.

Prof. H. H. W. PEARSON, M.A., Sc.D., F.L.S., has been appointed Honorary Director of the South African National Botanic Gardens at Kirstenbosch, Cape Town. Mr. J. W. MATHEWS, who for some years has been gardening in Cape Town, is Curator at these newly-established gardens.

WE learn with pleasure that the French Académie Internationale de Géographie Botanique has awarded to Mr. R. A. ROLFE its Scientific Medal in recognition of his work among Orchids. In addition to his valuable work in the Herbarium, Mr. Rolfe has edited the 'Orchid Review' since its commencement in 1893. The honour is conferred upon Mr. Rolfe at a fitting time, as it marks the coming-of-age of the 'Orchid Review.'

THE many friends of Mr. W. BOTTING HEMSLEY, F.R.S., will share in our congratulations to him on his election as an honorary member of the New Zealand Institute. As the number of honorary members is limited to thirty, and these need not of necessity be British, the honour is a very high one. Mr. Hemsley has also received the honorary degree of LL.D. from the University of Aberdeen.

MR. WILLIAM PURDOM, who returned from China some months ago, is, we understand, about to take part in a botanical expedition to the mountainous regions of Thibet.

MR. J. C. NEWSHAM, F.L.S., for several years the successful master at the School of Agriculture and Horticulture, Old Basing, Hampshire, has been appointed Principal of the New Farm Institute, now established at Usk, in Monmouthshire.

MUCH sympathy is extended to Miss JESSIE J. CLARK, B.Sc., who has been compelled through ill-health to resign her position in the Herbarium. Miss Clark left in December last and is now living at Westcliff-on-Sea, where we hope she will enjoy better health.

MR. T. D. MAITLAND, Curator in the Agricultural Department, Southern Nigeria, has been appointed a District Agricultural Officer in the Uganda Protectorate.

FURTHER changes have occurred among our journalistic members. Mr. C. H. CURTIS, after 20 years as Assistant Editor, has been appointed Editor of the 'Gardeners' Magazine,' and Mr. H. W. L. SOUTHGATE (Garden Staff, Kew) is Assistant Editor. Mr. J. WEATHERS has ventured to introduce a new penny weekly, 'The Gardening Advertiser.'

MR. STANLEY ARDEN, F.L.S.—We are sorry to learn that Mr. S. Arden, who left Kew in 1900 for Perak, F.M.S., is now an invalid. Since leaving a London hospital in the autumn he has been residing in Boscombe, Hants, where his wife has taken a house. We hope for better news of him in the future.

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

Home.

- J. Adamson, H. G., Phyllis Court Club, Henley-on-Thames.
 E. Bryant, H. G., Waterston Manor, Dorchester.
 T. G. Bullock, Asst. Instructor, E. Anglian Agricultural Institute, Chelmsford.
 T. H. Candler, H. G. to E. Cadbury, Esq., J.P., Bournville.
 L. W. Gardner, Gooseberry Mildew Inspector, E. Suffolk C. C.
 A. J. Hartless, H. G., Bishopsgate, Englefield Green, Surrey.
 H. Hughes, H. G., Hoar Cross Hall, Burton-on-Trent.
 C. W. Mayhew, Horticultural Instructor, Northumberland C. C.
 H. P. Norman, Supt. of Parks, Weston-s.-Mare.
 J. Richardson, H. G., Cwmdonkin Park, Swansea.
 A. E. Smartt, H. G., Ovenden Gardens, Sundridge, Kent.
 W. H. Tuck, Asst. Gooseberry Mildew Inspector, Norfolk C. C.
 A. Turner, Horticultural Supt., Madryn Agric. and Hort. College.

Indian and Colonial.

- K. G. Burbridge, Conservator of Forests, Sierra Leone.
 G. S. Crouch, Asst. Director of Horticulture in the Egyptian Dept. of Agriculture.
 R. A. Dümner, Kivuvu Rubber Co., Kampala, Uganda.
 A. E. P. Griessen, Officer in Charge Govt. Hort. Dept., Delhi.
 H. F. Macmillan, Supt. of Horticulture, Ceylon.
 A. C. Miles, Senior Curator, Agric. Dept., Gold Coast
 J. N. Milsum, Asst. Supt., Dept. of Agriculture, Kuala Lumpur, F.M.S.
 P. V. Osborne, Roy. Bot. Gdn., Sibpur, Calcutta.
 T. H. Parsons, Curator, Roy. Bot. Gdns., Peradeniya, Ceylon.
 R. L. Proudlock, Arboricultural Adviser to the Govt. of Bengal.
 L. F. Ruse, Roy. Bot. Gdn., Sibpur, Calcutta.
 H. B. Sharpe, Govt. Plant Import Inspector, Agric. Dept. B. E. Africa.
 F. G. Walsingham, Asst. Director of Horticulture in the Egyptian Dept. of Agriculture.
 J. G. Watson, Asst. Conservator of Forests, Kuantan, Pahang, F.M.S.

Foreign.

- J. Brown, Curator, Bot. Gdns., Smith College, Northampton, Mass., U.S.A.
 E. J. Canning, Nurseryman and Landscape Architect, Northampton, Mass., U.S.A.
 M. Free, Instructor, School of Horticulture, Ambler, Pa., U.S.A.
 H. Hutchinson, Hardy Hill Nursery, Turtle Creek, Pa., U.S.A.
 W. H. Judd, Arnold Arboretum, Jamaica Plain, Mass., U.S.A.
 J. Ridley, Shanghai Sumatra Tobacco Co., Langkat, Sumatra.
 C. Van der Voet, Arnold Arboretum, Jamaica Plain, Mass., U.S.A.

WEDDING BELLS.

Mr. E. Brown	to Miss Ruth Eleanor at Andrews.		June 23, 1913.
Mr. H. E. Downer	„ Miss A. V. Whelan	„ Orange, N.J., U.S.A.	June 7, 1913.
Mr. H. W. Epps	„ Miss Cissy Brack- pool.	„ Southend-on- Sea.	Dec. 23, 1913.
Mr. T. Hunter	„ Miss A. Brooms- grove	„ Badminton.	Feb. 4, 1913.
Mr. F. R. Long	„ Miss S. O. Mebody	„ Gopeng, Perak.	Oct. 1913.
Mr. W. Newell	„ Miss Gertrude Odell	„ Minnesota, U.S.A.	Sept. 22, 1913.
Mr. Louis Recordon	„ Mdle L. Joubert	„ Lyon.	Aug. 2, 1913.
Mr. A. W. Tidy	„ Miss Humphries	„ Kington Lang- ley.	Sept. 1, 1913.
Mr. A. Turner	„ Miss B. Parrock	„ Beckenham.	Dec. 23, 1913.
Mr. C. van der Voet	„ Miss A. Zobel	„ Waltham, Mass.	Dec. 6, 1913.
Mr. W. L. Wood	„ Miss E. M. Cooper	„ Penang.	Feb. 16, 1912.

NOTES.

	Rainfall in inches.	Temperature.	
		Maximum.	Minimum.
1913.			
January	2.45	51° F.	22° F.
February.....	.89	54	23
March	2.06	59	26
April	2.63	67	25
May	1.78	81	32
June50	84	41
July	2.18	77	44
August	1.25	81	45
September	1.90	75	43
October	3.46	67	36
November	2.19	60	29
December91	54	24
Total rainfall for 1913 ...	22.20	—	—

THE official grand total for the attendance of the public in 1913 was 3,792,581. For some years previous there had been substantial annual increases, but the figures given show a small decrease as compared with 1912. August provided the greatest monthly attendance (614,555), December the smallest (61,552), and August Bank Holiday the largest for any one day (107,085). The smallest attendance (22) was on January 13, on which day the Gardens were closed at 2.30 P.M. owing to fog.

SOME members of the permanent staff are to be congratulated on having received substantial additions to their pay during 1913, and

greatly increased annual leave. The constables, labourers, and some others have been granted trifling concessions, but the gardeners remain as before.

OLD KEWITES AT HOME.—The following Old Kewites from overseas visited the Gardens during 1913:—J. Anderson, R. Band, G. H. Eady, A. R. Gould, T. Hunter, A. C. Miles, and W. H. and Mrs. Patterson (Gold Coast); K. G. Burbridge (Sierra Leone); E. Brown and J. D. Snowden (Uganda); M. T. Dawe (Beira); W. H. Johnson, A. B. Culham, F. Evans, R. Gill, and T. D. Maitland (S. Nigeria); J. Gossweiler (Angola); J. Jones (Dominica); W. C. Fishlock (Virgin Islands); H. F. Macmillan (Ceylon); R. Derry (Singapore); J. A. Elliot (India); W. O'Mahony (Nice); J. M. Purves (Nyasaland); W. Robson (Montserrat); J. Burt Davy (Pretoria); A. E. Duley (Crimea); and M. Free (U.S.A.). It is an extensive list, but even so it may not be quite complete.

AN addition has been made to the Gardens by the purchase of Gumley Cottage and Chestnut Cottage on the south side of Kew Green. The two cottages originally formed one Georgian house which was built early in the reign of George III. for the accommodation of the Court during his Majesty's long stay at Kew. The house is to be used chiefly for microscopic work.

OFFICIAL GUIDE FOR VISITORS.—An official guide has been appointed to conduct parties of visitors round the collections contained in the garden, plant houses, and museums, and to point out objects of particular botanical interest. The appointment has fallen to Mr. S. T. Dunn, M.A., F.L.S., who was formerly in the Government service as superintendent of the Botanic Garden, Hong Kong. This departure is welcomed by those who find Kew and its treasures too complicated and vast to be easily and readily understood. The scale of charges is as follows:—Sixpence for each person attending a morning tour, and threepence for each person attending an afternoon tour.

A KEW MEMORIAL TO SIR JOSEPH HOOKER.—A memorial in the form of a marble mural tablet has been placed in Kew Parish Church. Below the inscription are a medallion portrait of Sir Joseph, and five panels of plants with which the investigations of the great botanist are closely associated. The portrait, which represents Sir Joseph at the age of 80, is by Mr. Frank Bowcher, and is an excellent likeness. The floral panels represent the following plants. Above, on the left, *Aristolochia*, and *Nepenthes* on the right. In the left lower corner *Cinchona*, commemorating the introduction of that plant into India and Ceylon, and on the opposite side *Rhododendron*, recalling Sir Joseph Hooker's classic journeys in the Himalayas. In a smaller centre panel *Celmisia* evokes the memory of Hooker's Antarctic voyage. Below the panels are the family motto, and that of the Most Exalted Order of the Indian Empire.

WILFUL DAMAGE BY SUFFRAGETTES.—Kew has been selected by the suffragettes as one of the scenes of their exploits. On the morning of Feb. 8, 1913, between 1 and 4 A.M., they broke into the Gardens, and by removing the glass from a door panel obtained entrance to the Orchid Houses, where they smashed and mutilated plants in a manner that one can scarcely accredit to sane adults. The weather favoured the raid, for the wind blew half a gale and there was heavy rain all night. The collection of *Anectochilus* was smashed to fragments, while many Cattleyas, Odontoglossums, Dendrobiums, and Cypripediums, mostly plants in flower, were either torn to pieces or smashed down. Altogether 136 plants were either destroyed or damaged. The mischief was discovered by the night stoker at 4 A.M. He at once called the night policeman, who summoned the Curator and foreman, but the perpetrators escaped without detection. Within a fortnight another outrage was committed; this time, two misguided females were caught red-handed, but the picturesque tea pavilion was razed to the ground by fire.

MR. W. B. LITTLE has distinguished himself as a motor cyclist. In 1912 he succeeded in winning a Gold Medal and Silver Cup for the best performance by a private owner in the Auto-Cycle Union 6 days' trial from Taunton as a centre. In June last he rode in the Tourist Trophy races in the Isle of Man, and while his times in practice were good, he had bad luck in the race, *e.g.* blew the cylinder head off. These races appear to have been very strenuous, one competitor being killed, while quite a number were left in hospital with broken legs and collar-bones. In August our friend was one of the British team in the Anglo-Dutch trial, which Great Britain won easily. He was also in the British team of three which won the 200 Guineas Cup in the International 6 days' touring trial. Mr. Little also holds several "first-up" records, including Wrynose Gap, Hardnott Pass, Mount Skiddaw, and Helvellyn, in the Lake District. Although good positions have been offered him in the motor world, his love for a peaceful occupation is too great for him to give it up.

THE LATE MR. THOMAS COOPER.—The death of Mr. T. Cooper in his ninety-eighth year occurred at Kew on May 16, 1913. Kewites of ten years to twenty years ago will remember his familiar figure in the Succulent House, ever ready to impart his vast knowledge to those interested in his favourite plants. With failing health his visits became less frequent, and finally discontinued. He had travelled in South Africa and collected and introduced many plants into cultivation, two of the best known being *Galtonia candicans* and *Asparagus plumosus*.

THE KEW LAKE.—In the past two or three years the lakeside has been even more picturesque than before, and the hardy flowers near the water's edge have created scenes of unusual splendour. Bold groups of Daffodils, Kniphofias, Siberian Irises, Japanese Anemones, and *Anchusa Italica*, Dropmore variety, lend pleasing tones of colour that add charm to the surrounding landscape at various seasons. It is hard to believe that the lake is an entirely artificial creation. It was made by Sir William Hooker in 1861–2 on the site of an old gravel pit. The lake is over 5 acres in extent, and it is interesting to note that the terrace around the Temperate House was formed of excavated materials while the gravel was used for making paths.

THE SIXTEENTH ANNUAL SOCIAL was held on Jan. 10th at the Boat House, Kew. There were about 140 present, including a large number of lady friends, and a good muster of "old boys," some of the latter making long journeys to enable them to be present. Mr. A. Symons as M.C., and Messrs. James & Ruck as stewards, arranged a splendid dance programme. Mr. G. C. Johnson was Secretary. Songs were rendered by Messrs. Gardner, Glover, James, Richli, Southgate, and others. The Social, as in past years, was a great success, and still merits its reputation of being a jolly evening.

ROYAL GARDENS, KEW, SWIMMING CLUB.—The Temporary Club formed last year was turned into a Permanent Club at a General Meeting held 27th Feb., 1913, when H. W. Ruck was elected Captain, and H. B. Sharpe, Vice-Captain, with B. Tindall as Hon. Sec.

The first year has been a very prosperous one, 49 persons having joined as Ordinary Swimming Members, and 5 as Honorary Swimming Members.

The privilege of cheap tickets was obtained at the Public Baths, Richmond, and Professional Instruction obtained also. The great event of the year was the Annual Championship Race from Isleworth Ferry Gate to Kew Bridge, about 1½ miles.

This was held on July 25th, and attracted considerable attention from the public. After a very exciting race W. N. A. Ward finished first, in 20½ mins., followed by H. W. Ruck, 21 mins.; J. C. Beswick, 22 mins. 10 sec.; G. B. Mould, 23 mins. 10 secs.; J. A. Mingay, 24 mins.; H. B. A. Tindall, 25 mins.; and M. J. Barnett, 26½ mins. Messrs. Lynch and Grinham and an Hon. Member, Mr. Burgess, were forced to leave the water owing to cramp. Two Relay Races and a 6-length Race were held in the Baths during the season.

The Club became affiliated to the Royal Life Saving Society in June last, and it was arranged to have instruction in life-saving, commencing September 1st, but unfortunately, after three practices they had to be abandoned owing to an insufficient number of members attending.

The President, Mr. Hill, has very kindly presented the Club with a

solid silver Challenge Cup to be competed for every year in the River Thames.

It has been very encouraging to note the frequent attendance at the Baths of so many beginners, and the great progress made by practically all the members during the past season.

The Financial Report shows that, starting the year with a balance in hand of 15s. 9d., the receipts were £8 9s. 7d.; expenses £6 16s. 3d., leaving a total balance in hand of £2 9s. 1d.

The progress made, and the support received by the Club during its first season, augur well for the future.

ROYAL GARDENS FOOTBALL CLUB.—*Season* 1912–13. This seasons results showed a marked improvement compared with the preceding season: 21 matches were played, 6 won, 13 lost, 2 drawn, whilst 51 goals were scored for and 72 against.

At the commencement of the season the committee appointed an Entertainments Secretary in the person of Mr. G. C. Johnson, and judging from the success of his labours this experiment might well be repeated.

Two Social Evenings were held, the first realising £1 8s. and the second £1 4s. 4d.; this, needless to say, greatly improves the financial position of the club.

A very hot and exciting struggle took place between the young gardeners in the North *v.* South match, the result of which was in favour of the South.

Season 1913–14. It was decided to run a fortnightly programme of matches this season, as trouble had been experienced in the past in the endeavour to place a full team in the field every week. An energetic committee was formed, a full list of fixtures arranged, and a good list of supporters procured; this, coupled with a balance from last season of £2 11s. 10½d., enables the financial accounts at present to show a substantial balance on the right side.

Mr. Johnson has been re-elected Entertainments Secretary, and a successful Social Evening was held in December which also helped to swell the coffers of the Club.

The result of the matches played this season, so far, is moderate: 7 have been played, 2 won and 5 lost, 15 goals scored for, 24 against.

Since last season we have lost the valuable aid of several players, notable among whom was our energetic Hon. Sec., Mr. Bertram Tindall, and our thanks are due to them for past services.

The Captain of the team is J. Ellis, with H. L. R. Chapman as Vice-Captain. The Honorary Secretary is F. G. Harcourt.

THE CRICKET CLUB.—*Season* 1913. The season has been a most successful one. Of 19 matches arranged only 2 were abandoned, and of the 17 played, 9 were won, 7 lost, and 1 drawn. On five occasions the following scores were reached:—163 *v.* Gunnersbury Park, 149 *v.*

John Innes Horticultural Institute, 135 *v.* Kew Albion, 111 *v.* Mr. Hill's XI., and 101 *v.* Dover House.

The bowling of the team was exceptionally strong this season, Messrs. Chapman, Claiden, Harcourt, Mudge, and Parsons figuring prominently in this department.

With the bat, Messrs. Harcourt, Claiden, Glover, and Mudge were persistent good scorers.

The matches were all enjoyable, those with Carter's, Dover House, Sutton's, Mr. Hill's XI., Veitch's, and Sander's, meriting special mention in this respect.

Mr. Hill's XI. again proved the stronger, though only by the narrow margin of 125 to 111.

The season has been a success financially. The levy, by means of which the adverse balance of 1912 was cleared, left the sum of 7*s.* 6*d.* in hand. The receipts, plus the 7*s.* 6*d.* in hand, amounted to £13 15*s.* 0*d.* The expenditure was £11 9*s.* 1½*d.*, thus leaving the substantial balance of £2 5*s.* 10½*d.*

The following were the Officers for the season:—*Captain*, F. Glover; *Vice-Captain*, E. J. Mudge; *Committee*, H. W. L. Southgate, H. Ryall, A. J. Meads, H. Ruck, A. W. Maynard, B. Service; *Hon. Treasurer*, A. Osborn; *Hon. Secretary*, T. H. Parsons.

THE ANNUAL LIST OF STAFFS, published as an Appendix to the Kew Bulletin, is of considerable interest as showing at a glance the distribution of Kew-trained men holding Government posts at home, in India, and the Colonies. A notable feature has been the failure of our comrades to obtain such positions in Australia. We are therefore particularly pleased to be able to record that Mr. C. E. F. Allen, who went out to Queensland during the past year, intending to farm on his own account, has accepted the position of Curator and Economic Botanist at Port Darwin, Northern Territory. We have little doubt that in due course we shall have the pleasure of printing letters from him about his new and comparatively little-known sphere of activity as interesting as the African ones we have had from him in the past.

THE KEW FLAGSTAFF.—The recent lowering of the flagstaff, owing to decay, removes for the time being one of the most conspicuous objects in the Gardens. The pole, a fine specimen of the Douglas Fir, *Pseudotsuga Douglasii*, came from Vancouver Island. It was brought to the London Docks slung to the side of a large vessel, towed up the river, and erected in 1861. Its possession by Kew is due to the generosity of Mr. Edward Stamp, of the firm of Messrs. Anderson, Anderson, & Co., who were at that time engaged in the timber trade of British Columbia. Commercially, the wood of the Douglas Fir is known as the Oregon Pine. The spar was originally 159 feet high, and 20 inches in diameter at the base, the age of the tree from which it was cut being about 250 years, and the total height 180 feet. When high

up in the air the top of the pole looked thin, but when lowered the apex is seen to be as thick as a scaffold pole. Once previously, in 1896, it was found necessary to take down the spar, remove the base, and splice on a piece of Pitch Pine. As can only reasonably be expected, the evidences of decay now are much more serious. Even if it is decided to re-erect the sound portion, the pole will not form such an imposing feature as formerly, towering as it did above the tallest trees in the Gardens. We hope it may be possible to obtain another equally fine specimen from British Columbia.

THE JOHN INNES HORTICULTURAL INSTITUTION.

THROUGH the important bequest of the late Mr. John Innes, of Merton, Surrey, a station was founded in 1910 for the purpose of horticultural instruction and research.

The station is known as "The John Innes Horticultural Institution," and is situated on the Merton Park Estate, one mile from Wimbledon Station.

The available funds (amounting to upwards of £5000 a year) are administered by Trustees, who are advised by a Council.

The Council consists of twelve persons, representing The Board of Agriculture and Fisheries, Royal Horticultural Society, Fruiterers' Company, National Fruit Growers' Federation, Oxford, Cambridge, and London Universities, and the Imperial College of Science and Technology.

The scheme laid down is to establish and maintain the Institution for the purpose of affording practical and scientific instruction in horticulture; to carry out investigation and research, particularly with fruit trees, fruits, shrubs, vegetables, and flowers; to endeavour to improve existing varieties, and to create or introduce new ones, and to further generally the interests of horticulture.

W. Bateson, Esq., M.A., F.R.S., V.M.H., late Professor of Biology in the University of Cambridge, is its first Director.

The scientific staff at present consists of four Students and two Minor Students, who are engaged in research in plant breeding, mycology, entomology, chemistry, and bacteriology. There are also several voluntary workers.

The garden staff at present numbers seventeen, including six young gardeners known as "Exhibitioners," who are appointed for two years under regulations similar to those laid down for the young gardeners at Kew.

In the first place five acres of land were acquired, and during the first year a laboratory, three large plant houses (each 85 ft. long) connected by a corridor, and other offices were erected and occupied.

The remainder of the ground was drained and trenched and laid out in formal plots of a quarter of an acre or less.

The land is of a rather heavy nature, overlying retentive clay, and having only been worked with the plough, a "pan" had formed through which the surface water could not readily pass; but after draining and trenching and being well worked, it is rapidly improving.

Early in 1912 three additional acres of available land adjoining were purchased, and the old walled-in garden of "Church House" near by was hired on a lease. This old garden affords shelter for plants which we cannot give them elsewhere, and the soil being light and of good depth, gives us a choice of soil for various crops.

A large fruit house (85 ft. by 18 ft.) was also built to accommodate fruit trees in pots, and made insect-proof by the addition of gauze shutters fitted to all ventilators.

The experimental work in plant-breeding covers a wide range of subjects, and has to do with various problems with which the practical gardener cannot effectively deal.

The nature of, and the possibility of eliminating, rogues in culinary peas is being investigated on a large scale. The important study of self-sterility in fruit trees is carried on under reliable conditions in the fruit-house mentioned above, and the results should be of great service to the practical grower in the future.

From the seeds produced, fairly large numbers of seedling apples, pears, and plums of known parentage are being raised and worked on to stocks, and should in a few years afford useful information on the inheritance of the factors concerned in the production of good fruit, such as flavour, size, colour, fertility, habit, disease resistance, Gooseberries, Currants, and various members of the *Rubus* family are being raised from seed with a view to testing their edible qualities and resistance to diseases, such as the American gooseberry mildew.

Among the subjects that are being investigated are:—

The inheritance of doubling in *Campanula*, *Begonia*, and other flowers; the inheritance of variegation, and sex in *Tropæolum*; the nature and causes of bolting in Cabbages and Sugar-Beet; the improvement of the commercial qualities of Flax; the breeding of potatoes and wheat; the inheritance of the factors involved in the fruiting characters of the Strawberry and Capsicum; and various problems in the leaf and flower characters of *Primula sinensis* and *P. Kewensis*. The chemistry of the colours in *Antirrhinum* and other flowers is also being studied.

The purpose of all these researches is to acquire accurate knowledge of a fundamental kind which may be used in the furtherance of practical horticulture.

No periodical is published by the Institution, but the results of these investigations will appear from time to time in the established scientific and horticultural journals.

General collections of fruit trees, hardy trees and shrubs, and herbaceous plants are gradually being acquired, which add interest to

the establishment, and afford opportunities for the gardeners to keep in touch with general subjects.

Instruction is given to the garden staff in plant-breeding from time to time, and during the winter courses of lectures are provided by the scientific staff on insect pests and plant diseases, etc.

The gardeners are allowed to attend the large London horticultural exhibitions; also the Royal Horticultural Society's meetings at Vincent Square, as far as possible.

The establishment is not open to the public, but interested visitors are made welcome, and various societies have visited the Institution by appointment with the Director.

Persons desiring to carry out systematic experiments on subjects cognate with the purposes of the Institution are accommodated as far as possible. Laboratory space is, however, at present small and insufficient, but it is hoped that before long a considerable addition may be made.

E. J. ALLARD.

PLANT-HUNTING IN THE TYROL.

OUR party arrived at Riva, on the Lake of Gardo, on July 7, with the object of collecting plants for the Six Hills Nursery. Although the mountains in the immediate neighbourhood of Riva looked promising, and are said to have a rich and varied flora, we did not collect there, but proceeded next day, by automobile, to Storo, a quaint and picturesque town about thirty miles distant. Storo is on the frontier of Austria and Italy, and is almost unknown to tourists; the chief industry appears to be silk-spinning, and mulberries are largely grown as food for the silkworms.

We had a definite object in coming here, and that was to obtain *Daphne rupestris*, which is found near the summit of the Cima Tombea, about eight hours' climb from Storo.

The general flora of the Cima Tombea is not particularly striking, though a number of first-class plants are to be found. The first plant of interest noted was *Phyteuma comosum*, but as it nearly always grows in crevices of hard rock, it is almost impossible to obtain specimens with any root. Another plant found in similar situations, but much more widely distributed, is *Pæderota Bonarota*, and of this we collected a useful stock; this plant, by the way, is not common in cultivation, and when better known should make a valuable addition to the rock-garden; it is closely related to the Veronicas.

On ascending, other good plants found were *Primula Auricula*, *Saxifraga mutata*, and *Carex baldensis*, and on reaching higher altitudes, *Saxifraga caesia*, both in grass and on rocks; *Daphne striata* and *Arnica montana* were very abundant. Near the summit there were acres of *Primula spectabilis* just passed out of flower; a few weeks earlier this

must have been a magnificent sight. We now came to the object of our expedition, *Daphne rupestris*, in full flower, but very difficult to reach and very difficult to dig out with any root; however, with the help of the guide, who climbed like a goat, we obtained a very fine stock. Though very free-flowering in nature, *Daphne rupestris* almost refuses to flower in cultivation if grown on its own roots, but grafted on *Daphne Mezereum* it is a profuse bloomer and a good grower.

Spending the night in a mule-shed, we returned to Storo the next day and to Riva the day after, where we packed and dispatched our first consignment of plants.

Leaving Riva, and spending a night at Verona, we reached Ferrara, a small town at the foot of Monte Baldo, our next collecting-station. With the exception of a few plants that we wanted, Monte Baldo is not a particularly fruitful ground for the collector. On the lower grassy slopes *Gentiana verna* was plentiful, and *Dryas octopetala* in full flower was a grand sight at higher altitudes. Masses of *Potentilla nitida*, varying from pure white to deep pink, made one wish this plant would flower as freely in cultivation. Near the summit *Saxifraga cæsia*, *Ranunculus alpestre*, *R. Thora*, and *Gentiana acaulis* var. *Clusii* were very abundant.

Without being the least dangerous, the ascent of Monte Baldo is exceedingly steep, and as there is only one stream passed on the way up, the climber reaches the refuge at the summit in a very parched condition. From the summit is obtained a magnificent view of the Lake of Gardo.

Staying all night in the refuge, we descended next day by a different route and collected a very large stock of *Geranium argenteum*, which we found in full flower, and also a useful lot of *Primula Auricula* var. *marginata*.

Leaving Ferrara, we next went to Bozen, and from there walked to Cortina along the Dolomitenstrasse, a distance of about one hundred miles. The walk occupied four days, and in many respects was the most interesting part of the whole trip; we passed through many quaint towns and villages where the dress and customs varied considerably, while the scenery along the route was magnificent. As we had to carry a certain amount of luggage with us in rucksacks, collecting in large quantities was out of the question, but we found a number of useful colour-forms and varieties, notably a very dwarf *Campanula linifolia* and a form of the same species having a long tubular flower of a distinct pink shade. Along the Dolomitenstrasse the meadows were in full flower, and I am of the opinion that there are still a number of useful plants not in general cultivation, though of course known to botanists.

On arriving at Cortina, the end of our walk, we drove to Misurina, a place consisting of three or four hotels and a few cottages on the Lake of Misurina. From here we went up the Drei Zinnen, where we

found a rich and varied flora, but, unfortunately, a heavy snowstorm prevented us from having more than one day collecting; however, we obtained good quantities of *Anemone vernalis*, *Primula minima*, *P. longiflora*, *Primula Auricula* var., *Saxifraga squarrosa*, *Gentiana brachyphylla*, and a pink variety of *Soldanella alpina*. Returning to Bozen, we finished our collecting by two days on the Schlern, where there is grand scope for the collector. Amongst other good things we got *Anemone vernalis*, *Androsace obtusifolia*, *Saxifraga squarrosa*, and *Saxifraga cæsia*.

On our way back to England we went round by Lindau, on the Lake of Constance, and had a look at Herr Sundermann's interesting Alpine nursery.

We were glad to find, on arriving home, that all the plants we collected had been received in good condition, and, I may add, are now nicely established.

CECIL DAVIES.

THE WEST COAST OF AFRICA AS SEEN FROM A CARGO BOAT.

HAVING been asked on several occasions to contribute an article to the Journal, I have promised to do so each time, but confess with regret that I have until now failed to keep my promises. However, if our esteemed Editor will accept this article I shall feel that he has forgiven my past digressions.

Since my first trip to the Gold Coast I have been keenly interested in West Africa. This is not to be wondered at, for "The Dark Continent" is noted for casting a spell over its visitors and claiming them as it were for its own. Amongst "Coasters" this is referred to as "The Call of the Coast." A popular writer of African novels refers to the Continent as "Dear Old Mother Africa" and continues: "What is that indefinable something which binds us to you, and calls us back again; no matter where we roam or how we may try to forget you?"

"Old Mother Africa" has cast her spell around me, hence my reason for wishing to see more of her! I travelled home last time by a cargo-boat, thinking it a good opportunity for seeing numerous places of interest along the coast, places which to the ordinary mail-boat passengers are perhaps known by their names, but never seen because they are not of sufficient importance to attract the so-called "Express Service." Cargo-boats, however, call where there is sufficient inducement, and the time taken to complete the voyage varies between three and six weeks, according to the amount of cargo to be taken on at the various ports.

Boarding the boat at Secondee a few hours before she was due to sail, I was welcomed by the Captain and Officers. These people are

always pleased to get passengers, as it makes a welcome change in a somewhat monotonous existence. Eventually we left and made a short trip to Axim, where mahogany logs were awaiting shipment. Axim, like most West Coast towns, appears to be pretty when viewed from the deck of a steamer; but to go ashore is disappointing: for one meets with a collection of filthy huts, tumble down buildings, dismal looking stores, and a few bungalows; while the African odour predominates over all. On leaving we made another short trip to Half Assine, where more timber awaited us. Having taken on the cargo we bade farewell to the Gold Coast and proceeded to the adjoining Ivory Coast, which is a French possession.

The difference between the French coastal towns and our own is very marked; the former being infinitely better in every way. More attention is given to the formation and arrangement, which suggests that some definite plans of the towns must have been decided on before building was commenced.

Some exceptionally fine logs of mahogany were shipped from Assine. The coast here is sandy and very shallow, thus permitting the logs to be towed a distance of about two miles from the beach to the steamer; this is done by a long rope being attached to the logs at the one end, and connected with a steam-winch on board. It is a picturesque sight to see the long line of logs, three abreast, being towed through the rolling surf, with a nigger astride each central log or skilfully balancing himself in a standing position while the spray dashes over his head and at times seems to completely envelop him. Several other ports were called at along this stretch of coast, various products being shipped as cargo. Timber, rubber, fibres, and ivory, are the chief exports.

Adjoining the latter territory is the Kroo Coast, a portion of Liberia. The towns along this stretch are in a deplorable state of filth, such as could exist only under a negro government. A good deal of rubber, palm-oil, and kernels, are shipped from these ports, also a quantity of ivory. One of the largest and most important of the Liberian ports is Gran Bassa, from which large quantities of Piassava fibre (the product of *Raphia vinifera*) is shipped. The fibre from the Bassa district is supposed to be the finest in the world.

From Liberia we passed on to the British territory of Sierra Leone, calling at the almost unheard-of Island of Sherboro, from where large quantities of oil-palm products are exported. The island lies at the mouth of the river, and appears to be nothing more than a heap of sand and stones borne down by the floods. The capital, Bonthe, is on the highest part of the island, but as this is not more than about thirty feet above high-water level, it does not appear to be any too safe when seen from the sea. Our next call was at Freetown. It is remarkable that so few writers have attempted to describe the beauties of this magnificent natural harbour, which is but third in the list of the world's most beautiful harbours. It is one of the finest panoramic views

imaginable, and as a first glimpse of tropical vegetation, in which palms predominate, it is a never-to-be-forgotten sight. The bluish-green water in the foreground, the pale green foliage commencing at the water's edge, becoming darker in appearance as the land rises rapidly to the deep dark green hills rising in the background to the sky-line, forms a pleasing view extending for about ten miles from the open sea right up into the harbour. As the ship passes along one catches sight of numerous pretty bays overhung with greenery and dotted here and there with tiny green islets.

Leaving Freetown with a deck cargo of Kola-nuts, we made a direct run for the Gambia. The only port is Bathurst, which is also the capital and Government Headquarters. I was fortunate in reaching the place during the ground-nut (monkey-nut) harvest, so had an opportunity of seeing the huge quantities of nuts that are brought in to the town for export. The nuts are the only crop of real value that can be grown for export in this long narrow strip of river territory. At the time of our arrival there were numerous ships of all sorts and all nationalities at the wharf, each taking on a cargo of nuts. Most of the ships were taking an entire cargo of nuts, filling their holds and then piling the decks with bags. After unloading the Kola-nuts (which would go up river by small craft and then into the vast territory beyond, where they are worth their weight in silver) we took several hundreds of bags of ground-nuts and a few tons of hides on board, then, as soon as the tide permitted, slid out of the river-mud into deep water, and gaining the open sea, made for Konakry, on the coast of French Senegal.

On landing at Konakry, it is a pleasant sight to see good solid buildings, sound roads and streets, with good drains and regular lines of shade trees. Such things come as a welcome change after the mud huts and corrugated iron buildings of the "Coast" towns. There are a number of European residents in the town, some excellent stores, and a very good market-place.

Leaving the latter town, we proceeded farther north to the charming town of Dakar. This is quite a French place, containing all those characteristic features which go to make their towns beautiful. To go ashore is a pleasure, and reminds one that they are within reach of civilization. There are many French residents with their wives and families, good shops and general stores, charming cafés with delightful gardens, where iced beer can be obtained at a reasonable price. There are a number of grand stone buildings, some excellent streets with side walks for pedestrians, and well-tended avenues of shade trees; also a public square with carpet bedding, and a central band-stand. After a two days' stay at this elysium, it was with regret that I rejoined the steamer to continue the voyage.

Rounding Cape Verde, the most westerly point of Africa, we met the north "trades," which made us uncomfortable for the next few days

until we reached the Canaries. After calling at Las Palmas and Teneriffe, we went on to Madeira, and from that "Isle of many beauties" steered direct to Liverpool, feeling not at all pleased that the voyage was so soon to end, for it had been a jolly time, with several memorable incidents that have left a deep impression, and will in all probability induce me to make a similar voyage at the earliest opportunity.

A. C. MILES.

GARDENING IN AMERICA.

THE Editor has asked me to give a few of my impressions of gardening in America. It is with considerable diffidence that I do so—because so much excellent matter has already appeared in the *Journal* from Kewites on this side of the Atlantic that it is difficult to strike a fresh note; moreover, 18 months' experience does not enable me to write very authoritatively.

One fact that has impressed itself upon me very strongly is—that anyone coming to this country, who wishes to succeed in the gardening profession, must have adaptability. This point has been insisted upon in letters to the *Journal* by many Old Kewites with much American experience, and to my mind it is a most important one. British gardeners are inclined to be conservative and are loath to give up the practices to which they are accustomed, but they will find, on coming to America, that there are many orthodox Old Country methods that will not be tolerated over here. As instances I may mention the use of the watering-pot and the hand-syringe—which are too slow for the American taste. Climatic conditions are, in most places, vastly different on this side of the Atlantic, and American gardeners have adapted their methods to these conditions.

No doubt there are many instances where British methods are superior to American, but the newcomer should await his opportunity to put them into practice, and should not shout until he has "produced the goods." Many influential men in the Horticultural profession on this side have complained of the lack of adaptability of the English gardener, and intending emigrants should bear this point in mind. Come with an open mind and hear all, see all, and say nothing, for a time at any rate.

The man fresh from the Old Country who comes to America must be prepared to accept any job that comes along, even though it may seem to be work beneath the dignity of a Kewite. There is a considerable reluctance on the part of the "powers that be" to the giving of responsible positions to men who have had no experience of the country, but no Kewite who has ambition need be afraid of having to stay in a subordinate position. There are many opportunities for gardeners, and a trained man is sure to rise.

A difficulty in connection with American gardening is the lack of skilled workmen. Mr. Moore mentions this in his article in the *Journal* for 1913, which article any Kewite who contemplates trying the U.S. should read. Much of the work in gardens has to be done with unskilled labour, frequently Italian, Polish, or Portuguese. It is difficult to get good work done with this class of labour, especially if, as often happens, its knowledge of English is practically nil. I write feelingly—being at present employed in carrying out some landscape work with the help of Portuguese labour. Fortunately, so far as I have seen, Americans are satisfied with a lower standard than would be accepted in English gardening.

Although the life of a gardener in America is not always a bed of roses, yet for my part I have, at present, no desire to return to take up gardening in England—life here impresses one with the sense of being more free, more spacious—one feels that, here is the land of great opportunities, and one does not have to be servile in order to rise.

Not the least of the delights that I have experienced in America is the unspeakable pleasure of meeting Old Kewites. MONTAGUE FREE.

SOME IMPRESSIONS OF PORTUGUESE EAST AFRICA.

ALTHOUGH Africa sees a good number of us, the Kew population on the eastern side is somewhat sparse; those homeward bound from India and the East would be well repaid by including this side in their itinerary.

From Lorenzo Marques northward the coasting steamer touches at a number of half-forgotten small ports, occupied by the Portuguese for centuries. Mozambique, with a huge fortress-prison some four hundred years old, every stone of which is said to have been brought from Portugal in the cockle-shell vessels of that period. Quilimane—a beautiful place, with fine old avenues of trees and patches of oranges. Many of the houses have walls eighteen inches thick and compare favourably with our own corrugated iron shanties, put up by people in a hurry. The roofs are often covered with quaint European tiles, not for æsthetic reasons, but because they were found to be the handiest thing for ballasting when vessels came here for cargoes of slaves.

Whaling seems an odd sort of industry for this coast; small steam craft are used, and I was told the catch had amounted to a hundred whales in three months at one station. The curious may also see the "bêche de mer" caught in places—a sort of huge sea-slug, a delicacy for the Oriental palate, likewise the dried fins of the shark, much esteemed in China by elderly gentlemen anxious to renew their youth.

I imagine the native on this coast is much less Europeanized than on the western side; at any rate, he is easier to handle, although his thoughts and outlook are profoundly different from ours. The

“cultured” white is hopelessly handicapped in dealing with him, which may account for the futility of our missionary efforts on the one hand and may partly explain the spread of Islam on the other. For the latter faith, fostered by Arab and Hindoo, grows and grows, and many shrewd observers consider it only a question of time for the religious flame to break out. After all, it is an arguable point whether the white man has any business in tropical Africa at all; ask the average empire-builder after a bout or two of fever and he will be inclined to agree, although he will scout the notion when he is fit.

There are many small islands scattered along the coast, some of which bear witness to the gallant efforts of the Jesuits of the 17th and 18th centuries to spread their faith. Their houses of stone were solidly built but now stand in ruins—a depressing sight. Our modern missionaries are better equipped with material things, but their spirit suffers in comparison with the burning zeal of these older worthies. One would like to read a symposium by Kew men, giving their impressions of coloured races and their moral codes and the like. It would be at least as interesting as lists of botanical specimens. J. STOCKS.

KEWITES AS AUTHORS.

A NATURALIST IN WESTERN CHINA*.

WE had long anticipated a book on China by our distinguished friend and intrepid plant-collector, Mr. E. H. Wilson. At last, after four separate expeditions, covering in all nearly eleven years, Mr. Wilson gives us the result of his travel and study of the natural history of Western China in two well written and profusely illustrated volumes. The author deals not only with the flora, but also with the fauna, the economic wealth, and the manners and customs of the tribesfolk inhabiting the Thibetan border. It is, however, to the flora that most attention is devoted. The chapter entitled “In Quest of Flowers” makes particularly good reading, and here, as in other parts of this work, one cannot help being impressed with the interesting way in which the author speaks of the treasures that he found. The work opens with an introduction by Prof. Sargent, which is of more than passing interest, since it lends some colour to the remarkable theory—originally conceived by Asa Gray—that the alliance of the flora of Western China is with that of eastern North America rather than with that of the Sikkim Himalaya. Much has been done to make known the Chinese flora, and much still is left undone, for there exist vast regions of the Celestial Empire into which no botanist has yet penetrated, and for this reason Prof. Sargent points out that a comparison

* A Naturalist in Western China, by E. H. Wilson. 2 Vols. (Methuen, 30s. net).

of the flora of eastern Continental Asia with that of eastern North America made at this time cannot be entirely conclusive. Wilson considers the Chinese flora the richest of the temperate regions of the world, and he gives graphic descriptions of the wild mountainous country which supports such a grand flora, but in parts only a sparse population. His references to the Chinese afford pleasant reading, for instance: "In my wanderings in China I have been singularly fortunate. The Chinese treated me always with kindly courtesy and respect. I was in interior China during the Boxer outbreak and the Russo-Japanese War, and visited places shortly before or after anti-foreign riots, but never experienced any incivility meriting the name. I engaged and trained as collectors a number of Chinese peasants, who served me faithfully throughout my journeys, and we parted with genuine regrets."

We heartily compliment our comrade on having written such an intensely interesting book, which, by the by, is freely illustrated from well chosen photographs taken by himself.

THE following books have been compiled by members of the Guild during the year under review:—

- BARTLETT, A. CECIL. *Gardening*. (T. C. & E. C. Jack, London.) 6d.
- CHIPP, T. F., B.Sc., F.L.S. *A List of Trees, Shrubs, and Climbers of the Gold Coast, Ashanti, and the Northern Territories*. (Waterlow & Sons, Ltd.)
- HAAS, P., D.Sc., & T. G. HILL. *Introduction to the Chemistry of Plant Products*. (Longmans, Green, London.) 7s. 6d.
- NEWSHAM, J. C., F.L.S. *Propagation and Pruning of Hardy Trees and Shrubs and Miscellaneous Plants*. 6s.
- *The Horticultural Note Book*. 4s. 6d.
- NEWSHAM, J. C., F.L.S., & T. V. PHILPOTT, M.A. *Agricultural Arithmetic*. 3s. 6d.
- NEWSHAM, J. C., F.L.S., & J. WRIGHTSON, F.C.S. *Agriculture, Theoretical*. (All published by Crosby Lockwood & Son, Westminster, S.W.)
- THOMAS, H. H. *Gardening Work for Every Day*. (Cassell & Co.) 1s. 6d.
- *The Rose Book*. (Cassell & Co.) 6s.
- THOMAS, H. H., & H. ESSENHIGH CORKE. *Garden Flowers as they Grow*. (Cassell & Co.)
- WEATHERS, JOHN. *Commercial Gardening*. 4 Vols. (Gresham Publishing Co.) 36s.
- *Beautiful Garden Flowers for Town and Country*. 1s. 6d.
- *Beautiful Bulbous Plants for the Open Air*. 1s. 6d.
- *Twentieth Century Gardening*. 1s. (All published by Messrs. Simpkin, Marshall, Hamilton, Kent & Co., London.)

LETTERS FROM OLD KEWITES.

Mr. J. RIDLEY writes from Shanghai Sumatra Tobacco Co., Tandjong Pocra, Langkat, Sumatra, on October 29, 1913 :—

“At present I am working on the rubber, of which we have about 4000 acres planted, although our concession is for 12,000 acres. We get about 14,000 lbs. of dry rubber per month from 4-year old trees, and we plant 800 acres annually. In about another month I am going in the fermenting sheds, and shall then stay in tobacco all my time. I have not seen much of the flora yet, as I have not been in the jungle, but as we get two holidays a month, I am going up the Wamfo River with another Englishman and a Malay in a boat. The Malays here do not do manual work on the plantations, this being done by Javanese and Chinese. It is with pleasure that I send £1 as a life subscription to the Guild.”

Mr. W. H. JUDD, who has recently taken up his duties in the Arnold Arboretum, writes from Jamaica Plain, Mass., U.S.A., on October 16, 1913 .—

“I had a splendid passage over here, and was sorry when it came to an end. I was met at the docks by Mr. Van der Voet, and lodgings had been engaged for me quite close to the Arboretum. The Arboretum itself is a very fine place, consisting of 220 acres of undulated ground, having scarcely a flat portion anywhere, and from one of the highest points the sea can be clearly seen. I found it rather hot here a time or two during the summer when the temperature stood at 97° in the shade, and yet they tell me it has been a cold summer. These hot days are usually followed by a terrific thunderstorm, and the temperature will frequently fall 20° in less than an hour. The way in which most of the trees and shrubs fruit here is very surprising to anyone coming from England, and many are quite a beautiful sight now, especially *Cornus florida*. *Cornus Mas* was also full of fruit, but these fall off fairly early. I found a fair-sized shrub of *C. kousa* in a cemetery near by with quite a number of fruits on just recently. The *Loniceras* are also full of fruit, and look very fine. Close to the Herbarium are several large trees of *Cercidiphyllum japonicum*, some of which are also full of fruit. *Liriodendrons* grow very tall, and seedlings can be found coming up wild in several places. Several different species of *Rhus* are grown, and the colours of the foliage are now well developed. *Rhus Toxicodendron* grows every where about the countryside, climbing up trees and over the hedges, and *R. typhina* and *glabra* are quite as common. Another shrub that is now loaded with fruit is *Benzoin aestivale*; these are very beautiful, as are also large shrubs of *Symplocos cratægoides*, being loaded with fruits of a splendid ultramarine colour. I do not remember seeing this plant at Kew. *Nyssa sylvatica* grows 40 feet high and

is also full of fruit. The fruits of *Celastrus* and *Euonymus* are a feature, and fine bushes of *Euonymus alatus* are about the first to change the colour of their foliage in autumn. *Indigofera amblyantha* has been continuously in flower for three months, and is about 5 feet high. Growing in a damp part of the Arboretum amongst tall trees are quite a number of *Leitneria floridana*, both the staminate and pistillate forms. This also I have no recollection of as being at Kew. The *Viburnums* all fruit freely, especially such showy ones as *Wrightii*, *americana*, and *cassinoides*. The Lilacs and *Kalmias* of course I have not been here long enough to see in flower, but they must be quite a show when out in bloom. There are few evergreens here outside of the conifers, and it appears strange to see the common ivy on show as pot plants in the Horticultural Hall at Boston.

"All the labour connected with the Arboretum is done by Italians, who are under the care of Van der Voet. My time is spent in helping Mr. Dawson, who I find has a wonderful knowledge of trees and shrubs.

"Mr. Wilson is very nice, and a great help to me in many ways, and I frequently spend an evening with him. Prof. Sargent has been kind enough to give me a key of the library, a kindness I thoroughly appreciate, and I spend many an hour amongst the books, as opportunity will allow. The working hours here are from 7 A.M. till 5 P.M., and I come on duty every other Sunday. We are situated close to the city, it being about twenty minutes' run on the electric cars."

Mr. R. L. PROUDLOCK writes from Ramna, Bengal, 23th April, 1913:—

"I have much pleasure in acknowledging receipt of the copy of the Kew Guild *Journal* for 1913 which you have very kindly sent me. Please accept my best thanks for it. As usual, it contains a good deal of interesting and useful information. Needless to say, I have read it from cover to cover, and I have received a good deal of pleasure therefrom. The *Journal* is very creditably got up; and I am sure many Old Kewites, like myself, must look forward to receiving it as each year comes round.

"I am still at the above address, but am now under the Bengal Govt., since the province of Eastern Bengal and Assam was abolished.

"I have had some fever this year, and, consequently, I am not feeling very well. I am, however, looking forward to a change to Darjeeling for one month, where the fine, cool, fresh, mountain air will, I hope, put new life into me. While I am writing this the thermometer is standing at 96° Fahr. in the shade with a good breeze blowing; time 3.15 P.M. These continued high temperatures tell on one detrimentally in course of time. However, it is some comfort to know that the nights are still pleasant (73° minimum these days).

“Since the abolition of the partition of Bengal, the work here has been stopped to a considerable extent. There is, however, a proposal to establish a new University here at Dacca; and, if the scheme is sanctioned, there will be a great deal of laying out work to be done. My present work in Dacca (*i. e.*, Ramna) is chiefly confined to the work of maintenance of the avenues and other places which have already been laid out.

“I may say that Ramna is the new Civil Station which has been built just outside on the north side of the town of Dacca.”

MR. J. CAMERON writes from Trevanger, on April 24, 1913:—

“Of the varied and remarkable work done by Kew at home and abroad, that part which provides trained gardeners for foreign service—especially in India and the Colonies—is not the least important. From a practical point of view, as also from the results achieved, it is of the very first importance. Placed in favourable conditions to give ample scope to their abilities, many of these gardeners are creating little Kews of their own in different parts of the world. Such centres of horticultural activity spread their influence very rapidly, and the public garden soon becomes a centre of local nursery gardens, giving pleasant employment to many families. By such practical means the useful work of Kew is widely appreciated in India and the Colonies. Botany, and the higher scientific work usually pursued by specialists, does not grasp the public mind to the same extent as the simpler operations of pure horticulture.

“Such being the case, it is highly necessary that the gardener who goes abroad should be a worthy representative of the great institution that sends him out. Arriving at Kew at the close of his teens, he cannot be expected to know much of foreign parts or peoples. He should know his craft if he has been attentive, and the exercise of acquiring that knowledge will have made him strong. Two years at Kew will brace him up intellectually if there is real application during that strenuous period. But without help and advice in other things that matter he will still be handicapped in taking up a responsible appointment where people of the higher services are his neighbours and friends. For this reason it is well that volunteers for foreign service should have a special course of training at Kew. Without such knowledge our young friend can have no conception of the real task before him, or of his own importance as a scion of Kew in a foreign land.

“Much will be expected, even by princes and governors. Then, underlying these acquired qualifications is needed strength of character, tact, modesty, and perseverance.

“With alien races patience and friendly help goes a long way towards mutual understanding and goodwill. The language of the country should be learned and spoken. A young man qualifying to this extent

is capable of holding the best gardening appointments, and should be well paid. The present scale of pay in India (Govt. of India) is generally considered inadequate for men of this stamp, and compares unfavourably with the emoluments received from native princes. Men who devote their whole service to India and the Colonies should have a special claim in the matter of salary."

MR. JOSEPH SCHÖN writes as follows from 3641 Congreso, Buenos Aires, October 8th, 1913:—

"I believe many readers will be surprised to hear that the conditions are far from satisfactory. Argentine is generally looked upon as the Eldorado of the world, but it is certainly not so for gardeners.

"One hears everywhere how the Argentine Government encourages emigration. Yes, quite true; no money whatever is wanted on entering this country, and for agriculturists there is even a free passage. But this is of little use to a gardener who, finding himself first of all handicapped by the language (which is Spanish) expects, in a country of such importance many horticultural establishments, but there are very few indeed. Now if the gardener gets employment, he will earn in most cases no more than 50 to 60 pesos monthly (one peso = 1s. 8d.) with bothy. But he has also to work from half-past four till seven o'clock in summer, with three hours' rest at dinner-time. Unfortunately the bothy is in most places anything but good; besides, all the requirements of life are excessively dear. There are some good places, but they are scarce. Government and city positions are worked on quite modern lines, at least as far as working hours are concerned; these places work generally eight hours a day.

"The conditions are better for a man who comes here on appointment as I did, which, by the way, it is quite legal to do. Still better is the outlook for a man who has sufficient capital and commercial ability to start a business for himself. With the rising importance of the country and the continuous growth of the population he may quickly double or treble his capital, never mind what branch of horticulture he may choose.

"The climate is really beautiful, not only about Buenos Aires, but also in other parts of the country it is good and healthy for white men. The temperature round Buenos Aires during the winter time is seldom below freezing-point, and in the summer not often above 95° F. But I believe that the fine climate is just the very reason why there are so few opportunities for gardeners; and a gardener should certainly think twice before emigrating to this country in spite of all the good things that are said about South America."

IF

If flowers could whisper secrets
 And leaves confession make,
 Might *some* lives not shine brighter,
Some hearts forget to break ?

Could Rose in cloistered pleasaunce,
 Could Lily robed in white,
 Interpret love's deep riddles—
 Diffuse a little light !

Could Rosemary and Lavender,
 Sweet flower and fragrant leaf,
 With magic whisper visualise
 To one, another's grief !

Oenothera, Evening's Primrose,
 The gloaming's *châtelaine*,
 Low in the ears of one of us
 Explain the other's pain !

Did flowers but whisper secrets
 And leaves their tales unfold,
 Earth would be nearer heaven for some,
 And dross seem more like gold.

H. H. T.

IN MEMORIAM.

STEFAN KÜFFEL.

ABOUT three years ago Mr. Küffel left Kew and soon afterwards he took up a position in the Botanic Gardens of Zürich University. He was a young Austrian, full of life, and a good talker. He was deeply devoted to botanical and horticultural science, in which he had great ambitions. His hopes, however, were never realised, for he died on January 21, 1913. The high esteem in which he was held may be gathered from the following note, written by his friend Mr. W. Meyer, an Old Kewite now residing in Germany:—

“ It is with deep regret that I let you know that my dear friend Stefan Küffel, who was until lately working at the Botanic Gardens, Zürich, is dead.

“ Küffel was born in Austria, and, after his apprenticeship, came to Germany, where I made his acquaintance in the Royal Botanic Gardens, Berlin. After working with him for two years, I proposed that we should see England, and he agreed to my suggestion. Having obtained a recommendation from Mr. Behnick, at present Curator of the Botanic Gardens in Heidelberg, and formerly Head Gardener at the Royal

Botanic Gardens, Berlin, we entered the nursery of Mr. C. J. Bause, South Norwood, S.E., and in 1909 we entered Kew; so that altogether I worked with him four years. He was a hearty good friend to me and to all who knew him. The friendship, which we once hoped and believed would never grow cold, remains unaltered after his death, but it is dreadfully hard to lose him."

SIDNEY HUTCHINGS.

It is our painful duty to record the death of Mr. Sidney Hutchings, which occurred in Jalpaigusi, N. Bengal. Mr. Hutchings died suddenly of heart failure on December 31st, 1912. He left Kew in 1875 for an appointment under the Land Mortgage Bank, in one of their tea-plantations in Assam. He was afterwards transferred to the Western Duars in North Bengal. Mr. Hutchings specialised in tea-growing, and for many years he was connected with tea estates in Northern Bengal. At the time of his death he was managing the Rahimabad Tea Estate, in the Jalpaigusi District, Duars, N. Bengal. Mr. Hutchings took a keen interest in the Kew Guild, to which he was a life subscriber.

HAROLD JOHN BAKER.

With deep regret we learn of the death of Mr. H. J. Baker, who left Kew in 1905. Mr. Baker died at Edmonton, Alberta, Canada, on January 9th, 1913, after meeting with an accident two days previously while at work. Before coming to Kew he had been employed in the Veitchian Nurseries at Exeter, where he was very popular and was recognised as a keen and able worker. This reputation he upheld whilst at Kew. His contemporaries will remember the enthusiasm with which he would argue on various subjects with the laudable desire of getting *to the bottom of things*.

Being desirous of obtaining Continental experience he subsequently went to Germany. On his return he obtained an appointment at Leonardslee, from whence he was invalided home, having injured himself at gymnastics. After recovering, he worked for a time in the neighbourhood of Exeter and then migrated to Canada, where he had been for about two years. His sudden and unexpected end is all the more to be deplored, as he was soon expected to return to his home in Exeter.—J. S. C.

SUB-FOREMEN.

<i>Name.</i>	<i>Department.</i>	<i>Entered Kew.</i>	<i>Previous Situation.</i>
Baker, A. F.	Arboretum	Oct. 1912..	J. Veitch & Sons, Ltd., Kingston Hill.
Beswick, J. C.	Temperate House	Sept. 1912..	Fota, Co. Cork.
Collins, W.	Temp. Ho. Pits.	Apr. 1912..	Silwood Park, Ascot.
Comer, S. G.	Propagating Pits.	Feb. 1911..	Boconnoc, Lostwithiel.
Divers, J.	Herbaceous	Mar. 1912..	Belvoir Castle, Grantham.
*Ellis, J.	Decorative	July 1911..	Dobbie & Co., Edinburgh.
Glover, F.	Ferrieres	July 1912..	Headington Hill Hall, Oxford.
Johnson, G. C.	Decorative	June 1912..	Dover House, Roehamp- ton.
Meads, A. J.	Palm House	Mar. 1912..	Hillbrook Place, Iver Heath.
Miles, S. H.	Orchids	June 1913..	J. Veitch & Sons, Ltd., Langley.

GARDENERS.

<i>Name.</i>	<i>Entered Kew.</i>	<i>Previous Situation.</i>
Arnold, W.	June 1909..	Trained at Kew.
Barnett, M. J.	Apr. 1912..	Dunedin B. G.
Bell, A. R.	Apr. 1913..	Dicksons, Chester.
Bennett, F.	Dec. 1913..	Woolverstone, Ipswich.
Bintrner, J.	Nov. 1913..	Farm Nursery, Hampton.
Braybon, E. A.	Mar. 1913..	St. Margaret's, Beckenham.
Bristow, W.	Apr. 1909..	Trained at Kew.
Butler, F. B.	June 1913..	Penllergaer, Swansea.
Chapman, H. L. R.	May 1913..	Ball's Park, Hertford.
Clark, J. W.	Jan. 1913..	Torre Abbey, Torquay.
Coombes, G.	Sept. 1913..	Nuneham Park, Oxford.
Cooper, T.	Feb. 1913..	Knightons, Finchley.
Evans, W. N.	Sept. 1912..	Burbage Experiment Station.
Farries, G.	Feb. 1913..	J. Veitch & Sons, Ltd., Feltham.
Flippance, F.	Nov. 1913..	Box Grove House, Guildford.
Grinham, F. B.	Oct. 1912..	Hillier & Sons, Winchester.
Grout, G.	Apr. 1913..	Silwood Park, Ascot.
Harcourt, F. G.	Feb. 1913..	Flexford House, Guildford.
Hibbins, W. R.	May 1913..	Hutton Hall, Guisborough.
Holden, A.	July 1912..	C. Elliott, Stevenage.
Iwamoto, K.	Feb. 1913..	M. Krogh, Tsingtan.
Jackson, P. C. E.	Apr. 1913..	A. Ll. Gwillim, Sidcup.
Keys, A.	May 1913..	Oxenford Castle, Ford.
Kündig, J.	June 1913..	Ferrières en Brie.
Longhurst, H. J.	July 1913..	The Lodge, Effingham.
Lynch, R. S.	Oct. 1912..	Cambridge B. G.
Matthews, C.	Mar. 1913..	Denton Manor Gdns., Grantham.
Maynard, A. W.	July 1912..	F. Maynard, Borough Green.
Mein, G. W.	Sept. 1913..	Biel, Prestonkirk.
Mould, G. B.	Mar. 1913..	Weycliffe Nurseries, Guildford.
Nitsch, R.	Sept. 1913..	C. F. Bause, S. Norwood.
Philpott, G. T.	Feb. 1913..	Shortgrove, Newport.
Ruck, E.	May 1909..	Trained at Kew.
Service, R.	Oct. 1912..	J. & R. Service, Dumfries.
Sparrow, J.	Apr. 1910..	Trained at Kew.
Stewart, W. W.	Dec. 1913..	West Hall, Oyne.
Timmers, A.	Nov. 1913..	Bees, Ltd., Sealand.
Walsh, C. S.	Apr. 1913..	Beechfield, Blackpool.
Ward, W. N. A.	Mar. 1913..	Cutbush & Son, Highgate.
Williams, R. O.	Jan. 1913..	J. Veitch & Sons, Ltd., Feltham.
Wright, A.	May 1912..	Birmingham B. G.
Yuill, E.	July 1913..	H. B. May & Sons Ltd., Edmonton.

OLD KEWITES.

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

<i>Name.</i>	<i>Left Kew.</i>	<i>Present Position and Address †.</i>
*Abbott, James M.	Sept. 1898 ..	83 High St. South, Rushden, Northants.
Adams, R.	April 1903 ..	St. Joseph's Hospital, Burlington Lane, Chiswick.
Adamson, John	July 1909 ..	H. G., Phyllis Court Club, Henley-on-Thames.
Aggett, Walter H.	June 1888 ..	Supt., Public Gdns., Bermondsey, S.E.
*Allard, Edgar	Aug. 1899 ..	John Innes Hort. Inst., Merton, Surrey.
*Allen, C. E. F.	Feb. 1904 ..	Curator & Economic Botanist, Port Darwin, N. Territory, Australia.
Allen, Justin	Mar. 1911 ..	York Lodge, Upper Parkstone, Dorset.
*Allt, W. S.	Jan. 1911 ..	20 East Bowery St., Newport, R.I., U.S.A.
*Anderson, J.	Oct. 1905 ..	c/o Bank of British W. Africa, Accra.
*Anderson, J. W.	June 1910 ..	Asst. Supt., Botanic Garden, Singapore.
Archer, Sydney	Mar. 1895 ..	Orkney Cottage, Taplow, Bucks.
*Arden, Stanley, F.L.S.	June 1900 ..	27 Churchill Rd., Boscombe.
*Armbrecht, Otto	Jan. 1898 ..	Derneburg, Prov. Hanover, Germany.
Armstrong, James	Mar. 1893 ..	Box No. 266, Marion, Mass., U.S.A.
*Armstrong, Robert	Oct. 1897 ..	170 Bartlett Av., Toronto, Ontario, Canada.
*Arnold, George	Oct. 1894 ..	Priorswood, Raheny, Co. Dublin.
*Arthur, Alec	April 1899 ..	The Homestead, Genesco, N.Y.
Ashlee, T. R.	April 1910 ..	British Columbia.
*Ashton, Frank W.	May 1885 ..	116 Hewitt Road, Harringay, N.
Astley, James	Nov. 1898.	
Attenborough, F.	Feb. 1896 ..	H.G., Annesley Ho., Villa Rd., Nottingham.
*Aubrey, A. E.	April 1910 ..	2 Raby Terrace, Neston, Chester.
Augull, Karl	July 1902 ..	Maj Nursery, Nowotscherkask, Russia.
*Auton, William J.	Feb. 1897 ..	H. G., Pyrford Court, Woking.
Avins, Charles W.	Oct. 1894.	
*Badgery, R.	Aug. 1906 ..	Supt., Govt. Gardens, Cawnpur, India.
Baggesen, Niels	Dec. 1900.	
Baggs, A. E.	Apr. 1911 ..	3605 Knight Rd., Vancouver, B.C., Canada.
Bailey, Thomas	Sept. 1892 ..	Ravenscourt Park, W.
Baker, G. A.	Jan. 1911 ..	Beechhill Nursery, Murrayfield, Edinb.
Baker, James	1876 ..	H. G., Begbrook House, Frenchay, Bristol.
Baker, John Gilbert, F.R.S., F.L.S., V.M.H.	Jan. 1899 ..	3 Cumberland Road, Kew.
Baker, William G.	Dec. 1887 ..	Curator, Bot. Gardens, Oxford.
Bale, J. H.	Mar. 1909 ..	Carbrae, Abbotsham, near Bideford.
*Ball, C. F.	Aug. 1903 ..	Asst., Royal B. Gdns., Glasnevin, Dublin.
*Band, R.	Oct. 1908 ..	W. A. Rubber Plantations, Ltd., Asiakwa-Bu-rimsu, Kibbi, via Accra, Gold Coast.
Banks, G. H.	Mar. 1906 ..	F., Botanic Gardens, Cambridge.
*Barker, Michael	Mar. 1884 ..	Sec., "American Florist" Co., Chicago.
Barnes, Richard	Mar. 1871.	
*Bartlett, A. C.	May 1898 ..	52 Forest Road, Kew Gardens.
Barton, Robert	June 1890.	
Bass, Edward	Mar. 1899 ..	The Gardens, Sunnylands, Dallington, Northampton.
Bass, Thomas	Mar. 1899 ..	Dairy Cottage, Kew.
*Bates, G.	Feb. 1904 ..	H.G., Digswell, Welwyn, Herts.
Batters, Frederick H.	Feb. 1891.	c/o Messrs. Cutbush, Nurserymen High-gate, N.
Baum, Jacob	July 1900 ..	N., Pallud sur Vevey, Switzerland.
*Baumann, Ludwig	Mar. 1902 ..	1366 Lucretia Ave., St. Louis, Mo., U.S.A.
Baumgardt, Hilding	Mar. 1902.	
Beale, J. H.	Apr. 1911 ..	Aldenham House Gardens, Elstree.
Beatty, E. J.	Nov. 1905 ..	c/o Henry F. Michelle, Andalusia, Pa., U.S.A.

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