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ANNUAL REPORT.

(1905 - 1906.)

THE Committee have pleasure in presenting the Report for the year ending April 30, 1906.

The *Journal*, of which 636 copies were distributed, was favourably received. A number of applications for it were received from nonmembers, a complete set being sold to a lady who expressed a keen interest in Kew and its records. Four complete sets still remain, the price of each being $\pounds 2 \ 1s$.

The total receipts for the year amounted to about £60. This included 17 life subscriptions, bringing the total Life-Members up to 225. The expenditure was £41 12s. 10d., the slight increase being due to the greater cost of the illustrations in the *Journal*.

Owing to the clause in the will of the late Mr. Thomson providing that the Director of the Gardens for the time being should be a trustee for the sum bequeathed by him to the Guild, the retirement of Sir W. T. Thiselton-Dyer necessitated a change, and the Director, Lieut.-Col. D. Prain, kindly consented to become a trustee, his co-trustee being Mr. G. Nicholson.

The Annual Dinner took place as usual at the Holborn Restaurant, Dr. A. Henry presiding; 141 members were present.

Five deaths occurred among members during the year, namely, Mr. F. W. Burbidge, M.A., Mr. D. Dewar, Mr. O. T. Hemsley, Mr. J. F. Leslie, and Mr. J. Mahon.

The members of the Committee who retire in accordance with Rule 3 are Messrs. Aikman, Rolfe, Hales, and Banks; Mr. H. Cowley has been selected by the gardeners at Kew to replace Mr. Banks; Messrs. Rolfe and Hales offer themselves for re-election, and Mr. Aikman desiring to retire, the Committee recommend Mr. W. Dallimore, Arboretum Foreman, for election in his place.

The Auditors for the present year are Messrs. Dallimore and Young. The Committee recommend that the Auditors for next year should be Messrs. Skan and Tinley.

Balance	Sheet.	1905 - 1906.
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Receipts.				Expenditure.
			d.	£ s. c
Balance from 1904-1905	19	8	11	Secretary's Honorarium 5 0
Life Subscriptions	17	0	0	Postage and Stationery 3 13
Annual Subscriptions and } Sales	21	4	6	Printing and Freight of Journals 32 8
Interest on New South } Wales Stock	8	6	4	Transfer of New South Wales Stock
Interest on Deposits in P.O. Savings Bank }	0	7	8	Balance 1905–1906 37 14
Advertisements in Journal	13	0	0	
Total	£79	7	5	£79 7

Capital Account, April 30th, 1906.

	£287	14	7		£287	14	7
				Cash in hand	0	0	9
				Savings Bank	37	13	10
Life Subscribers' (225) Fund	195	6	1	Stock $(3\frac{1}{2} \text{ per cent.})$ Deposits in Post Office	250	0	0
Thomson Bequest	£ 92	s. 8		£250 New South Wales	£	s.	d.
Liabilities.				Assets.			

Audited and found correct,

W. J. BEAN, Treasurer. W. N. WINN, Secretary.

May 8, 1906.

W. H. YOUNG, } Auditors. W. DALLIMORE,

ANNUAL GENERAL MEETING, 1906.

THE Thirteenth General Meeting took place just previous to the Annual Dinner at the Holborn Restaurant on May 28th. The proceedings were of a purely formal nature. Mr. Watson occupied the Chair, and after the Annual Report and Balance Sheet had been read by the Secretary, he moved their adoption. This was seconded by Mr. Denning and supported by Mr. Cundy, and was then adopted unanimously by the meeting.

The next General Meeting and Dinner will be held at the Holborn Restaurant on the eve of the Temple Show, 1907.

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ANNUAL DINNER, 1906.

THE Annual Dinner of the Guild was held at the Holborn Restaurant on May 28th. The Chair was taken by Mr. B. Daydon Jackson, 135 members and others being present.

MR. B. D. JACKSON in proposing the toast of "The Kew Guild" said :

"The Guild, like so many other associations based upon common interests, has the faculty of surviving as a whole, though the constituent atoms may change. It was a happy idea to link together past and present Kewites into this brotherhood of those who have shared in the activities, so many and so varied, of the Royal Botanic Gardens at Kew. The majority of those here this evening, have passed, or are passing, through the allotted scheme of departmental service, and are either now engaged elsewhere, or are looking forward to a post of greater responsibility. The staff is necessarily of greater permanence, and it has to shape the work done. The thought which is predominant in my mind, and must also be in yours, is, that the last few months have witnessed a very important event in the history of the establishment. During its career as a public institution of something like sixty-four years, it has had the fortune to have had only three Directors; an average therefore of about twenty-one years has been the lot of those who have guided the activities of Kew. The first Director gained his experience at Glasgow, his two successors were apprenticed, if I may use that term, at Kew, in each case serving as Assistant-Director, before attaining the chief position; but in the case of the new head, Lieutenant-Colonel Prain, the first method has been reverted to, for he gained his knowledge of garden administration and the requirements of a great scientific establishment at Calcutta. He brings with him all the prestige attaching to his previous tenure of the highest botanic position in India. It is a great gratification to me and all of us that he is present with us tonight. It would ill become me to attempt a set eulogy of the work he has accomplished, not only in India, but in international science; his work is known, and is his record. I will content myself by simply stating that, distinguished as have been his predecessors, there need be no apprehension of any relaxation of the high ideals held by those who have gone before him in the conduct of Kew, and it is certain that under his care, the Royal Botanic Gardens will in the future, as in the past, worthily maintain their world-wide reputation.

"My own recollections of the Gardens date back to my boyhood; twenty-five years ago the Herbarium became the head-quarters of my work, and though now my visits have perforce become less frequent, my association with the establishment has been drawn closer by certain official duties entrusted to me. I have seen the Kew Guild from the beginning, and have witnessed the care shown in the laying of its foundations. Its function is modest, but it has completely succeeded in doing all that it set out to do, that is, to bind together past and present Kewites into a whole; it keeps touch with those who have gone into distant parts of the world, and it welcomes them back when they revisit their old haunts. This is accomplished by much hard work on the part of the executive, to whom we owe so much for their unobtrusive services; to them doubtless it is a labour of love, and their reward is in such a gathering as the present. By steadfast adherence to the primal charter of its constitution, the Kew Guild will continue to flourish, long after our term of service is ended.

"I couple with this toast the name of Mr. Weathers."

In rising to respond, MR. J. WEATHERS said he was sensible of the honour conferred upon him by the Committee, although he felt that he could hardly do justice to the toast of the "Kew Guild."

That evening, the men of Kew were gathered together for the opportunity of meeting old friends and becoming acquainted with new ones. The assembly was fairly representative of the men who had been trained at Kew, as it contained gardeners in all stages of development, and of most varied experiences in the field of horticulture. Many were there for the first time, and it would probably appear to them that the Kew Guild was now an institution of some importance. Amongst the new comers he was pleased to see the new Director, and he felt sure that every member of the Guild would extend a most hearty welcome to Colonel Prain, one of the most distinguished of Kewites. At the same time universal regret would be felt at the absence on that particular occasion of their late Director, Sir Wm. Thiselton-Dyer, who had been officially connected with Kew for 30 years, and who, during that period, had left indelible marks of his directorate upon the Gardens. The great majority of the members of the Guild were no longer employed at Kew. They were scattered all over the face of the globe, having the Kew Certificate as their Hall-mark of horticultural ability. A very large number of them had been able to carve out more or less distinguished careers for themselves. He would like to see the Kew Certificate carry as much weight in gardening matters as another kind of Kew Certificate carried in the chronological world. Perhaps the time was not far distant when such would be the case. It would be a question for the Guild itself to decide whether it might not use its influence in making not only Kew men, but trained gardeners generally (who had no chance of securing a Kew training), take a more leading part in the work of the world. At present most of our great Tea, Coffee, Cocoa, Rubber, and other plantations in the Colonies were managed by men who had been trained at Kew, but comparatively little credit was given for the pioneer work they were doing.

Kew men were pioneers also in showing the gardeners of the United Kingdom the way to effective co-operation amongst themselves. Mr. Weathers thought, however, the time had arrived when the Guild might do more important work than eating an annual dinner, putting money in the bank, and performing the usual functions of a mutual admiration society. Gardeners, who were not of the Kew fold, had already recognised the great value and importance of the Kew training and co-operation, and had imitated the Kew Guild by forming the British Gardeners' Association, an organisation that not only opened its arms to every member of the Kew Guild, but to every qualified gardener in the British Islands. He looked with confidence to the future of a great organisation of gardeners welded together in securing and maintaining the highest interests of their calling.

DR. A. HENRY proposed the health of the Director and welcomed his first appearance at the Annual Dinner.

IT.-COL PRAIN, in responding, alluded to the long and happy connection he had had with Kew men in India. Although, he said, like every other body of men they varied in their individual qualities, he could testify to their high efficiency and sense of duty as a whole.

MR. R. IRWIN LYNCH proposed the health of the Chairman, which was drunk with musical honours.

The musical part of the entertainment was under the direction of Mr. Hillier, and several charming quartettes and duets were given by him and his fellow artists. The function was generally voted to be one of the most enjoyable that has been held.

The following were present :---

B. Daydon Jackson (Chairman). W. Watson (President). C. Curtis (Guest). Prain Lieut.-Col. D. (Director). Mr. Devereux. Mr. Kaines. Artists. Mr. Pengelly. Mr. W. Ratcliffe. Aggett, W. H. Aikman, J. Allen, J. Andersen, A. W. Badderly, G. Badgery, R. Ball, O. F. Band, R. Bean, W. J. Behnick, A. Blackburn, A. Bliss, D. Blythman, T. W. Bowell, E. C. Braggins, S. Briscoe, T. W. Brown, T. W. Butcher, F. H. Butts, E. Cartwright, T. Cave, J. E. Chipp, T. F. Christie, J. S.

Cooper, E. Cope, Miss G. Cowley, H. Crisp, W. Cummins, Major. Cundy, C. Curtis, C. H. Dallimore, W. Dawe, M. T. Davies, H. J. Dear, G. Denning, W. Dixon, J. Dodd, W. Donaldson, A. H. Dorey, T. Down, W. J. Duley, A. E. Foden, W. Fox, W. Fraser, J. French, H. Gammon, F. Garnett, A. Giles, J. Girdham, O. G. Godseff, L. Goldring, W. Gregory, J. Guttridge, J. Hackett, W. Hales, Ŵ. Harding, C.

Hartless, A. J. Harwood, A. Henry, Dr. Hillier, J. M. Hislop, A. Holland, J. H. Humphreys, T. Hutchinson, J. Irving, W. Jennings, W. J. Johnson, W. H. Kidd, H. Lambert, J. Long, F. Longmire, F. J. Lynch, R. I. Mackay, A. Macmillan, H. F. Manning, W. Mayhew, C. W. McAllister, W. McGregor, D. McLaggan, W. Miles, A. C. Moore, H. J. Moosman, E. Morland, W. H. Newsham, Miss J. Nicholls, M. Nock, W. Osborn, A. Pearson, R. H. Pettigrew, A. A.

Pettigrew, W. W. Philp, F. J. Powell, Miss E. M. Powell, Temple. Preston, F. G. Purdom, W. Race, A. Raffill, C. P. Renton, J. Riebe, H. Rolfe, R. A. Sander, F. K. Simmons, J.

Smith, F. W. Spooner, H. Stirling, E. Stocks, J. Stroud, E. G. Summerfield, T. A. Taylor, W. Thomas, E. K. Thomas, H. H. Tidy, A. Tinley, G. F. van Overberghe, G. Veal, T. J. Wakely, C. Walden, F. H. Wallis, E. J. Watkins, J. Watson, J. Watson, J. Wilke, J. F. Wilson, E. H. Winn, W. N. Woodrow, G. M. Woolley, H. F. Young, W. H.

THE MUTUAL IMPROVEMENT SOCIETY.

WHENEVER a meeting takes place between past and present Kewites one of the first questions asked is, "How is the 'Mutual' getting on"? This is as it should be, for in addition to the Mutual Improvement Society being a great source of pleasure and instruction to young men at Kew, it is there that friendships are often commenced that last through life.

The Session 1905-6 was quite up to previous ones in the work accomplished, and the majority of the members took an active part in the business. The attendance was very uniform, the average working out at 39.9. One of the most popular lectures was that given by Mr. E. H. Wilson on "Wanderings in China," and on this occasion 87 members and friends were present. A lecture by Mr. T. W. Brown on "American Gardening" was also a great success, while lectures by Mr. Watson, Mr. Massee, and Mr. Rolfe were as popular as ever.

An innovation has been made during the last few years, by giving demonstrations of various classes of garden work in addition to the ordinary written matter. Such a demonstration on "Transplanting" was given on Oct. 23rd by Mr. Bean, the correct methods of moving large and small trees being shown by means of diagrams and models. The educational value of such demonstrations is great, but their value would be enhanced if lantern-slides were prepared so that detail work could be brought out clearly on a screeen.

The Hooker Prize was won by Mr. Moore, who was considered by the Committee to have worked the hardest in the interests of the Society throughout the Session.

Syllabus, 1905-6.

1905.

Oct.	9.	Indoor Gardening	Mr. W. Watson, A.L.S.
,,	16.	The Kew Arboretum	Mr. W. Dallimore.
,,	23.	The Transplanting of Trees	Mr. W. J. Bean.
,,	30.	The Genus Primula	Mr. F. J. Longmire.

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1905.	Syllabus, 1905–6 ((cont.).
Nov. 6.	Wanderings in China	Mr. E. H. Wilson.
,, 20.	American Gardening	Mr. T. W. Brown.
,, 27.	Soils	Mr. W. J. Moore.
Dec. 4.	The Effective Arrangement of	
	Bedding Plants	Mr. A. W. Proudlock.
" 11.	Orchid Hybridization	Mr. R. A. Rolfe, A.L.S.
,, 18.	Manures	Mr. R. Simpson.
1906.	. #	
Jan. 8.	Fungoid Diseases	Mr. G. Massee, F.L.S.
,, 15.	Indoor Ferns	Mr. A. Osborn.
,, 22.	Hardy Fruit Culture for Profit .	Mr. C. Harding.
,, 29.	Roses	Mr. F. G. Preston.
Feb. 5.	Fruit under Glass	Mr. J. Renton.
,, 12.	Fungoid Diseases of Fruit	Mr. G. Massee, F.L.S.
,, 19.	${\it Parks} and {\it Gardens} by the {\it Adriatic} +$	Mr. H. Riebe.
,, 26.	Begonias	Mr. W. Newell.
Mar. 5.	Rhododendrons	Mr. C. P. Raffill.
,, 12.	Secretary's Report.	

Chairman, W. DALLIMORE. Vice-Chairman, A. Osborn. Hon. Secretary, F. G. PRESTON. Assist. Secretary, H. Cowley.

THE LECTURES.

THE usual courses of lectures were given to the gardeners with the following results :---

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

31 certificates were granted. The highest number of marks were obtained by E. K. Thomas, 186; W. Head, 184; F. R. Long, 183. Maximum 200.

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

18 certificates were granted. The highest number of marks were obtained by W. Head, 248; F. Gammon, 237; W. J. Down and F. R. Long, 227 each. Maximum 260.

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

6 certificates were granted. The highest number of marks were obtained by H. Cowley, 98; F. H. Butcher, 96; T. Cartwright, 92. Maximum 100.

Chemistry and Physics. Lecturer, Dr. F. E. Fritsch, B.Sc., Ph.D., F.L.S. 27 certificates were granted. The highest number of marks were obtained by H. Cowley, 246; J. G. Watson, 245; E. K. Thomas and W. Head, 242. Maximum 250.

British Botany Club. Secretary, E. C. Bowell.

16 certificates were granted, and the collections of F. R. Long and F. Gammon specially mentioned.

APPOINTMENTS AND RETIREMENTS.

RETIREMENT OF SIR WILLIAM T. THISELTON-DYER.—The most notable event at Kew since the publication of the last number of the *Journal* has been the retirement of our late Director. As the *Journal* was already in the printer's hands when the announcement was made in December 1905, we could do no more then than just insert it. And as Sir William did not finally sever his official connection with Kew until March 31, 1906, a fuller notice of the event would in any case have had to be deferred until the present number.

Sir William's retirement may be described as ending a third epoch in the history of Kew as a public institution. The three Directors who had so far guided its destinies each held the reins for pretty nearly equal periods. Sir Wm. Hooker began to lay the foundations of Kew as we know it to-day in 1841. On his death in 1865, his work was brilliantly carried on until 1885 by his son, Sir Joseph, who added much to the lustre of Kew. But Kew undoubtedly acquired its greatest prestige and influence during the directorate of Sir Wm. Thiselton-Dyer. The improved condition of the Gardens, both under glass and outside, the efficiency and increased extent of the herbarium, the order and completeness of the museums, are all mainly due to him, for his were the stimulating influence and the guiding hand.

Of the eminent position Sir William holds in the scientific world it is not our province here to write. It is known to all the members of the Guild, and we sincerely hope that with the greater leisure he now enjoys he may be able to resume those individual labours in science which he had, perforce, to abandon when he took up routine official duties. There are, however, two elements in Sir William's character whose existence, no doubt, is revealed by the condition of Kew as he left it, but which, nevertheless, are not so well known to the public generally as to those whose privilege it has been to work with him. These are his organising and administrative ability, and his strong artistic feeling—two attributes not commonly found in the one personality, but a particularly fortunate combination in a Director of Kew. With regard to the Kew Guild the pages of this *Journal* show that it has had his sympathy and help from its commencement, and he has always had its best interests at heart. The eloquence of his speeches at our Annual Dinner will come back to the memories of all those who heard them, with the hope that they may yet hear many more.

On the morning of December 16, 1905, the day on which he resigned the directorship, he introduced the members of the permanent staff to his successor, Lieut.-Col. Prain. They took the opportunity of presenting to him an address which expressed their regret at the severance of old ties and contained a brief summary of his work at Kew and elsewhere.

DR. D. H. Scorr.—We regret that in our present directory Dr. Scott has had to be transferred from the present to the past Kewites. He resigned the honorary keepership of the Laboratory in July and has gone to live in Hampshire. He has this year been awarded the Royal Society's Medal—one of the highest distinctions a scientific man can receive—for his researches in fossil botany. Dr. Scott occupied the chair at our Annual Dinner of 1903, and has frequently shown his interest in the gardening staff by lecturing before the Mutual Improvement Society.

MR. R. IRWIN LYNCH.—On. Jan. 18, 1906, the Honorary Degree of M.A. was conferred upon Mr. Lynch in recognition of his services to botanical science in the University of Cambridge. Mr. Lynch has been Curator of the Botanic Garden there since 1879. He has also been awarded the Victoria Medal of Honour by the Royal Horticultural Society.

MR. J. GUTTRIDGE has been appointed chief superintendent of the Parks and Gardens of Liverpool. He had previously charge of the Botanic Gardens only. MR. W. HACKETT, late foreman of the tropical department at Kew, is now Assistant Curator of the Liverpool Botanic Gardens. The vacancy thus made at Kew has been filled by transferring MR. C. RAFFILL from the Temperate House, and MR. W. TAYLOR, sub-foreman in the propagating department, succeeds Mr. Raffill.

Other home appointments are MR. H. SPOONER as Assistant at the Imperial Institute, in succession to Mr. Wilson; MR. S. BRAGGINS as correspondence clerk to Messrs. Veitch; MR. F. C. DALGARNO as Park supt., Bowes Museum, Barnard Castle; MR. G. H. BANKS as foreman, Cambridge B. G.; and MR. A. J. HARTLESS, supt., Waterlow Park, N.

MR. E. H. WILSON.—Under the auspices of Professor Sargent and the Arnold Arboretum, Mr. Wilson is making his third journey to China as a plant-collector. He will go with the best wishes of all his fellow Kewites and with their hope that his present enterprise may be as successful as the two previous ones. He started on Dec. 5, 1906. On November 6th he was presented with the Veitchian Medal in recognition of his services to horticulture. Since January last he had acted as botanical assistant at the Imperial Institute.

THE following African appointments have to be recorded :---MR. W. H. JOHNSON (late Director of Agriculture, Gold Coast) as Manager of the Mozambique Co., Beira; MR. J. STOCKS as botanist to the Exploration Syndicate, Portuguese East Africa; MR. C. B. USSHER as botanist to the Mabira Forest Co., Chagwe, Uganda; MR. K. G. BURBRIDGE as Curator, Kumasi, Gold Coast; MR. H. DODD as Curator, Onitsha, South Nigeria; MR. J. L. WILLIAMS as Curator, Lagos. MR. W. E. MARRIOTT has joined the staff of the Pietermaritzburg Botanic Garden, Natal. MR. C. P. QUINTON has taken a post in Liberia.

IN ASIA the following appointments have been made:—MR. C. SNOW, sub-manager, Malaysia Rubber Co., Fed. Malay States; MR. T. W. MAIN, supt. Experimental Plantations, Kuala Lumpur, Fed. Malay States; Mr. J. H. STEPHEN, supt. Agri-Horticultural Society of India, Calcutta. The following have left Kew to join the Indian Botanical Service as probationers:—Mr. R. Badgery, Mr. W. Head, and Mr. P. T. Russell.

MR. H. NAVEL writes :—" I have left the Colonial Institute of Nantes to go to South America. I am to travel in North Brazil to study the Rubber trees of that country, especially *Manihot Glaziovii*. I shall be away at least three years."

MR. A. ULLERIKS has been appointed head gardener at Pandebjerg, Denmark.

KEW PALACE.

THE view of Kew Palace which we give in the present issue of the *Journal* is reproduced from a photograph taken by Mr. E. J. Wallis. The point of view is near the Greenhouse (No. 4). This aspect of the Palace has only been opened up for about a year, and was revealed by the removal of the old stables that used to stand midway between No. 3 (Wood) Museum and the Palace itself. The clearing away of these shabby old buildings has produced a great improvement in this quarter of the Gardens. Besides the acquisition of the charming view seen in the illustration, the Palace itself is made more accessible to the public, and the space occupied by the stable-yard and various nondescript shrubberies is now an open lawn.

The Palace is not only interesting on account of its connection with the Royal Family; it is generally admitted to be one of the finest examples of domestic Jacobean architecture extant. The precise date at which it was built does not appear to be known, but it was probably erected by Sir Hugh Portman about the end of the 16th century. He was a merchant trading with Holland, in consequence of which the house was known for more than a century as the "Dutch House." Over the door may be seen the date 1631; this apparently records the year in which it was sold by one of the Portman family to a Mr. Samuel Fortrey. About a century later the house came to be occupied by members of the Royal Family, and in 1781 the freehold of the property was purchased by Queen Charlotte, the consort of George III. After this the King and Queen lived here a good deal in simple, semi-rural style. The Queen (great-grandmother of King Edward VII.) died here in November 1818. Soon after this the house ceased to be a royal residence, and remained neglected, forlorn, and empty for about eighty years.

In 1899, after having been repaired, it was, by permission of Queen Victoria, opened to the public. It cannot be said, however, that the building has as yet been put to any very good use. Except for the architectural features—and it is interesting internally as well as externally, although the beauty of some of the old panelling is obliterated by paint—it has little to interest the general public. Some of the rooms are quite empty whilst others are hung with a series of dull, fifth-rate oil-paintings. The most interesting rooms are those containing engravings, prints, letters, old furniture, and various other relics of the Royal Family.

The term "Kew Palace" is a confusing one, having been applied at different periods to three distinct buildings, as may be seen by inspecting the interesting series of old engravings etc. in No. 3 Museum. The first "Kew Palace" in point of time was a plain, rather low, white building, known, properly, as "Kew House," which stood not far from the present sun-dial and was pulled down in 1803. A second "Kew Palace" was a remarkable castellated structure designed by Wyatt. It was commenced about 1803, but was never inhabited or even finished. It apparently stood on the ground now occupied by the "Upper" Arboretum Nursery and depot, and was demolished in 1827. The third is the one of which we now give an illustration.

KEW NOTES.

VISITORS TO KEW IN 1906.—During the past year 2,339,492 visitors have entered the gates at Kew. This represents an increase of over half a million on the numbers for any previous year. The attendance on Aug. 6, 1906, was a record one, 113,131 persons visiting Kew on that day. On three previous occasions only have there been more than 100,000 visitors on one day; these dates were May 26, 1890 (106,808), May 22, 1893 (100,727), and May 14, 1894 (103,112). The monthly attendances during 1906 were as follows :---

January	27736
February	33407
March	66613
April	267629
May	159071
June	513095
July	372398
August	425117
September	277917
October	137201
November	34042
December	25266
Total	2339492

WEATHER AT KEW.—The most noticeable features of the weather in 1906 were the dryness of the spring and late summer, the intense heat of the last days of August and the first ones of September, and the small amount of frost experienced. The heat and drought of August and September were so intense that nine-tenths of the Beeches in Kew had scarcely a leaf left on their branches by the end of September.

	Rainfall	Temperature.			
	in inches.	Maximum.	Minimum.		
1906.					
January	3.49	55° F.	23° F.		
February	1.76	52	23		
March	1.18	66	26		
April	•60	74	26		
May	1.25	77	30		
June	3.02	80	39		
July	1.10	83	43		
August	.67	93	43		
September	1.82	94.5	36		
October	3.24	70	32		
November	3.84	61	26		
December	2.02	56	19		
Total rainfall for 1906	24.02				

KEW PUBLICATIONS.—The only Hand-list published during 1906 was the 2nd edition of the *Hand-list of Ferns and Fern Allies*, price 5d. The first edition was issued in 1895.

A publication of great interest which has appeared during the year is the *Catalogue of Portraits of Botanists exhibited in the Museums at Kew*, price 5d. It has been prepared by Mr. James D. Milner of the National Portrait Gallery, and is "not merely a guide, but a trustworthy manual of botanical biographies." The collection of portraits of botanists at Kew is unrivalled, and we wish it had a better housing than it now possesses, which is merely odd corners of No. 1 Museum.

The *Kew Bulletin*, after a period of suspended animation, is now full of life again. During the past twelve months the volumes for 1900–05 were completed and published, and the numbers for 1906 appeared regularly. All the papers on Rubber Plants that have appeared in the *Bulletin* since its commencement have also been brought together and printed in one volume.

AN OBSERVATION made by Mr. Weathers during his speech at the Annual Dinner seems to call for a little comment. Mr. Weathers said he thought the time had arrived when the Guild might do more important work than eating an annual dinner and putting money in the bank. We should have thought that the issue of this Journal might have been counted as something of value done, although it is possible it may be included among "the usual functions of a mutual admiration society." And as to putting money in the bank, we can assure our members that no more is invested than is necessary to balance the liability of the Guild to its life-subscribers. There are 234 members who have paid their life subscriptions and have a right to expect their Journal annually as long as they live. Their subscriptions are invested for the purpose of earning something towards paying for this and other expenses, and the capital sum is only drawn upon to pay the remainder. We take this opportunity to once more draw attention to the great saving of time and trouble which is obtained by members commuting their annual subscriptions by a single payment of £1. This applies not only to the executive but to members themselves.

OLD KEWITES AT HOME.—The following members of the Guild residing abroad have visited Kew during the year. Messrs. M. T. Dawe (Uganda), H. H. W. Pearson (Cape Town), W. H. Johnson (Gold Coast), H. Powell (B. E. Africa), C. W. Smythe (Sierra Leone), A. E. Evans (Aburi), E. Brown (Uganda), A. Hislop (Pietermaritzburg), W. Fox (Singapore), H. Macmillan (Ceylon), H. J. Davies (Lucknow), B. Cavanagh (Madras), and C. Plumb from the United States. Mr. A. J. Brooks (Dominica) came home to be present at the Exhibition of Colonial Fruit on Dec. 4–5. THESE CHARMING LINES are by the late W. E. Henley. We reprint them here in the hope that they will recall to many Old Kewites pleasant memories of walks—not solitary ones—"by the river old and gray":—

On the way to Kew, By the river old and gray, Where in the Long Ago We laughed and loitered so, I met a ghost to-day, A ghost that told of you, A ghost of low replies And sweet inscrutable eyes,

Coming up from Richmond, As you used to do.

By the river old and gray, The enchanted Long Ago Murmured and smiled anew. On the way to Kew, March had the laugh of May, The bare boughs looked aglow, And old immortal words Sang in my breast like birds,

Coming up from Richmond, As I used with you.

With the life of Long Ago Lived my thought of you. By the river old and gray Flowing his appointed way, As I watched I knew What is so good to know: Not in vain, not in vain, I shall look for you again Coming up from Richmond On the way to Kew.

A TESTIMONIAL FOR OUR SECRETARY.—The only unsatisfactory thing about our finances is the forgetfulness of members to forward their annual subscriptions. This puts a good deal of extra labour on our already hard-worked Secretary. Of last year's *Journal* there are still 150 copies not paid for. The gentle art of reminding our debtors of their indebtedness, and doing it delicately, is, however, possessed to perfection by our Secretary, as the following extract from a letter shows:—"There "is a real need in these days of commercial activity for a new grade of "terminology that will render solicitation for the payment of accounts a "pleasurable proceeding. If I may judge from your letter of the third "ultimo, there is a fortune awaiting you in the counting-house when "Kew has done with you. I enclose P.O. for what is owing."

WAGES AT KEW.—Since the publication of the *Journal* some improvement has been made in the pay of various sections of the Kew staff. The maximum for the foremen and storekeeper has been raised to $\pounds 3$ per week, or $\pounds 2$ 5s. with house. The gangers, foreman carter, corporal constables, porters, constables and packer have been given one shilling per week more; and the carters and labourers have been raised two shillings per week. The labourers now receive 23s., but the pay of sub-foremen and gardeners still remains at 27s. and 21s. per week respectively.

There is still considerable dissatisfaction in the lower ranks of the employees and, to voice their grievances, a deputation representing the

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gardeners, labourers and constables waited on the President of the Board of Agriculture on Oct. 29th. We extract the following account from the *Gardeners' Chronicle*, Nov. 3, 1906 :—" The deputation, which was accompanied by the president and secretary of the United Government Workers' Federation, was introduced by Mr. W. Cheesman and supported by Mr. W. Crooks, M.P. The Director of the Royal Gardens was also present. The gardeners were represented by Mr. W. Purdom, a sub-foreman at Kew. After hearing the opinions of the men as stated at considerable length, Earl Carrington expressed his pleasure that they had combined, and promised that the whole question of the conditions of employment at Kew should be most carefully looked into. The wages of gardeners in the London Government parks are, we learn, 27s. per week, whilst the gardeners at Kew are paid 21s. per week, and they work longer hours."

THE CRICKET CLUB.—An accurate idea of the state of cricket in the Gardens can best be conveyed by presenting the match record for the past season :—

Date.	Opponents.	Where played.	Results.
Sat., May 5	Birkbeck College	Shepherd's Bush .	Won.
"" 19		Roehampton	
	Cadby Hall	Kew	
" June 2	St. Andrews	Away	Won.
"" " 16	Cadby Hall	Acton	Won.
,, ,, 23	Richmond Oddfellows, .	Richmond	Drawn.
,, ,, 30	Kew United	Kew	Lost.
	Dr. Burrell's XI		
Sat., ,, 14	Friar Park	Henley	Won.
	Chiswick House		
Sat., " 28	Birkbeck College	Kew	Won.
	Old Kewites		
	Gunnersbury Park		
" " ,18		Reading	Lost.
	Friar Park	Kew	Lost.
Sat., ,, 25	Richmond Oddfellows	Kew	Lost.

The Old Kewites match was again a decided success. The scores were :--Past 120 (Tribble 41); Present 77 (Bowell 38). In addition to raising the Past XI and captaining it, Mr. H. H. Thomas took 3 wickets for 1 run. After the match the teams were photographed, and tea was served in the Garden Library. Thanks to the hospitality of Mr. Frank Crisp and Messrs. Sutton & Sons, the away matches at Friar Park and at Reading proved to be particularly enjoyable outings. The most successful batsmen were Messrs. Bowell (batting prize), Tunnington (capt.), Kidley and Osborn; in bowling the best work was done by Messrs. Tunnington (bowling prize), Butcher, Preston and Bowell. The prize for fielding was awarded to Mr. Kidley. There was the advantagous novelty of a hard-working committee. June 29, 1907, is the date fixed for the next match between past and present Kewites.

THE NINTH ANNUAL SOCIAL GATHERING, which took place at the Boat House, Kew, on Jan. 12, 1906, was in every way as successful as its predecessors. About 150 Kewites and their friends attended, amongst them being a number of Old Kewites. In addition to the customary dancing, songs were contributed by Messrs. Briscoe, Giles, Moore and Long, and a violin solo by Mr. Kidd, whilst a Highland fling by Mr. Blythman and a sailor's hornpipe by Mr. Adamson evoked considerable enthusiasm. Mr. G. Pring acted both as M.C. and honorary secretary.

THE FOOTBALL CLUB.—There can be but few purely gardeners' football clubs in existence, and it speaks well for the sporting spirit of Kewites, that in face of the difficulties which of necessity confront it, there should be so much enthusiasm for the infant R. G. K. F. C. The season 1905–6 produced but few wins, but a lengthy league programme was very pleasantly carried through, and already, in the season now in progress, there is a marked improvement in form. It must be remembered that as Kewites do not get a weekly half-holiday, the club has in effect to run two teams, not a first XI and an A team, but two of equal strength, and this would produce a weakening effect upon any club in existence. Two members' matches, North v. South, have been greatly enjoyed. For permission to practise in the paddock near the Herbarium thanks are due to the Director. The Officers for 1906–7 are :—*Captain*, F. G. Preston; *Vice-Captain*, F. Walden; *Secretary and Treasurer*, C. W. Mayhew.

MARRIAGES.

Mr. E. C. H	lowell to	Miss	Whitley	at W	oodstock	Dec.	24, 19	906.	
Mr. P. Bolt	, Jr. ,,	Miss	Watkinson	, Н	ounslow	Jan.	1, 19	02.	
Mr. A. P. I	Bruce "	Miss	Robertson	,, Ea	ast Ham	June	28, 19	906.	
Mr. N. Gill	,,	Miss	Luker	"В	ombay	Dec.	7, 19	906.	
Mr. C. H. E	fumphries "	Miss	Arnold	,, A1	rds, Donegal	Feb.	27, 19)06.	
Mr. W. Mc	Allister "	Miss	White	" Ba	asingstoke	Aug.	29, 19	06.	
Mr. A. Mer	issier "	Miss	Vrillon	"H	oudan (S. & O.),	April	23, 19	06.	
				1	France.				
Mr. F. Roe	kens "	Miss	Haesaerts	" Sc	haerbeek	April	28, 19	06.	
Mr. F. T. S	mith "	Miss	Lawrence	" Ri	ichmond	May	26, 19	06.	
Mr. F. J. S	tayner "	Miss	L. B. Watsor	1 ,, Be	rea, Natal	Dec.	29, 19	05.	
Mr. W. Tay			Cryan			Dec.	12, 19	06.	
Mr. W. A.	Ward "	Miss	Aylward	,, Br	ockham, Surrey	Mar.	6, 19	06.	

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LETTERS ETC. FROM OLD KEWITES.

MR. J. BENBOW writes from La Mortola, Ventimiglia, Italy, Mar. 7, 1906:—"I herewith send you my life-subscription to the Guild. Long may it prosper! During this last week I have reflected a good deal upon the time I spent at Kew. Lady Thiselton-Dyer has been staying here for a short time, and my conversations with her have brought back to my mind very vividly many Kew memories of over twenty years ago. Sir William has gone, but his hard work has left behind a bright and living memorial.

"This, as you know, is my second sojourn on the Riviera. La Mortola is a very popular place as our visitors' list shows. On visiting days the road outside our front entrance is quite congested with motor-cars and carriages, belonging I may say to people of almost every nationality. I have another Kewite close by me—Mr. W. Crot (Kew, 1904). He has taken charge of Miss Willmott's newly-acquired property at Ventimiglia. He is very keen, and I think you will be hearing more of him later on.

"Lovers of the new No. 5 House at Kew would be most interested to see our gorgeous Aloes just now, especially *A. arborescens* var. *frutescens* (fiery red) and *A. Salm-dyckiana*, the handsomest of all in vivid colouring. Later come *A. supra-lævis* and *A. hanburyana*, which is the best of all the dwarf section and most to be recommended for pot-culture. Our climate here is an ideal one for succulents—no smoky fog or odours of Brentford gas and soap factories !"

AN OLD KEWITE AS MAGISTRATE.-Mr. Wm. Denning has been appointed Chairman of the Hampton District Council and a Justice of the Peace. Our Guild has had his hearty support since its foundation and his figure is a well known one at our annual meeting and Dinner. Mr. Denning is a Yorkshireman and commenced his horticultural career in 1850 as an apprentice in the gardens at Grimston Park near Tadcaster. He came to Kew in 1855 and left the year following. Mr. Denning writes :-- "After leaving Kew I was engaged as foreman "at Patshull-Lord Dartmouth's gardens. From there I went to Lord "Ducie's at Tortworth, after which I entered Lord Bolton's service and " was his head gardener for seven years at Bolton Hall, Bedale. In con-" nection with Kew I may say I was the first to take care of the succulents " in the then new house after they were collected together and put there. " Previously they had been scattered about in various houses." Mr. Denning is nearly 70 years of age but bears his years lightly. For about twenty years he has been in business as a market grower at Hampton. In offering our congratulations it is pleasant to feel that he is likely to carry his honours worthily for many years to come.

MR. JAMES UDALE, who for more than fifteen years has been chief

Horticultural Instructor for Worcestershire, has recently published a new work entitled "The Handy Book on Pruning, Grafting and Budding." It is illustrated by about 70 illustrations from photographs and drawings by Mr. Udale himself, showing right and wrong methods. The price is 1s. 6d.

THE FOLLOWING LETTER comes from Mr. Axel Pihl, who entered Kew in June 1857 and left in April 1859. His name has not hitherto appeared in the directory.—"I saw a notice of the Kew Guild in the Garden which led me to write and request you to send me a copy of the Journal. In accordance with your wishes I beg to give you now the following details of my life and career. I was born here in Stockholm in 1838, my father being a clergyman. I entered on my gardening career in 1854 as soon as I left college. The following year I set out for England. For two years I worked in the Botanic Gardens, Regent's Park, and in Fraser's nursery, Lea Bridge Road. Then, in 1857, I entered Kew. At that time Sir William Hooker was Director, Dr. (now Sir Joseph) Hooker. Assistant Director, and the first John Smith was Curator. On my return to Sweden I was, from 1860 to 1863, in the service of the Royal Academy of Agriculture. From 1863 until the present time I have been in the service of the Swedish Horticultural Society-for the first nine years as first assistant, and since then as Director of the Gardens and the Horticultural School. I have written some books on horticulture, and have been co-editor of the Society's Journal for the last 28 years. I am also President of the Society of Horticulturists in Stockholm and a member of the Royal Agricultural Academy."

MR. GRIESSEN, Supt. of the Taj Gardens, Agra, was invested with the Royal Victorian Medal by the Prince of Wales when the Taj and its gardens were visited by him and the Princess during their recent tour in India. Gardening at Agra is most difficult owing to adverse conditions of climate, but Mr. Griessen's management of the Taj gardens has been very successful. His work was referred to in very complimentary terms by the late Viceroy, Lord Curzon. It may be mentioned that the Royal Victorian Medal is a private medal issued by the King and given to persons whose services His Majesty wishes to recognise.

PERADENIVA.—A very attractive and interesting Guide to the Royal Botanic Gardens at Peradeniya, Ceylon, has been written by Mr. H. F. Macmillan, F.L.S. It contains a history of the gardens, portraits of the staff, and numerous excellent reproductions of photographic views of the most striking features of this beautiful spot.

 reading all the news about Kew. I got settled down here long ago, but, to tell the truth, I would rather start a new place than try and revive an old one like this. Anyone can see that there was a garden here at one time, but it has been terribly neglected. A cutlass is a very handy tool, but it won't do everything required in a garden. Still a cutlass and a horse are about all the stock of working material here at present. I came across a case of plants that had been received from somewhere, but only stumps and rotted remains were left. All the Kew plants sent out to me have been planted out and are doing well. The 'Para Rubbers' planted by Holland have grown well and flowered, but unfortunately none of the flowers have set. The 'Ceara,' on the other hand, fruits freely and there are any quantity of seedlings about. I tapped one the other day and obtained from it a nice 'biscuit.' Castilloa and *Ficus elastica* also seem to do very well, although the former has been badly affected by a borer.

"There are some fine Mangoes in the garden, introduced, I believe, from Trinidad. This is the first time of their fruiting, so I was glad to be able to send some to the Governor at Lagos. Lagos is now the headquarters of the colony. There is any amount of *Honckenya ficifolia* about, especially on land previously farmed, but the natives do not seem to value it, although I am told it is shipped in quantity from Sierra Leone and commands a good price.

"I see Sir William is soon to leave you. I hope he may long enjoy the rest he has so well-earned."

MR. C. E. F. ALLEN writes from Conservator's Camp, Victoria Falls, Rhodesia, Nov. 3, 1906 :--- "I am just back from a trip extending to about 500 miles north of this place. It was a delightful three weeks on the veldt, and I have never felt better than I do now. We walked about 25 miles a day, and that not taking into account the many detours after specimens and after game. It is the best life in the world as long as one's feet hold out-and mine did! We had 200 natives with us, carrying etc., and I did the doctoring for the camp. I collected a good many specimens which I shall shortly despatch to Kew. It was very interesting to extend my knowledge of the natives-quite one of the most interesting features of life in the wilds. The people north of Broken Hill are very different to the Barotse, they are livelier and have more fight in them I should say. I let a rocket off at a kraal we camped near one night. The natives said that the fire went up above the moon and stopped at a star. They were told that it was a sign that we were going to kill an elephant, however we didn't, so no doubt much prestige is lost to the white man at that kraal. The country north is the best I have seen, the only real drawback (and a big one) is the tse-tse fly which makes it impossible to take cattle there. However, with the advent of the railway the destruction of the game follows, and then exit tse-tse. As Conservator I now have charge of the Falls and surrounding country. The rains are not here yet, and one can only live and hope. The weather is really delightful but my garden is very dry. The river and Falls, the islands and the trees, are an everlasting source of pleasure, but still I could do with the view from Kew Bridge for a change ! I hope to be back on holiday in the spring."

MR. W. H. JOHNSON, F.L.S., writes from Kumasi, Ashanti, Gold Coast, Dec. 12, 1905 :—" It is difficult to believe that until a few years ago human sacrifice was common here in this, the 'City of Blood.' Now a railway runs into Kumasi from the coast—a distance of 167 miles—wide streets have been built, and several mercantile firms have established large trading houses. The first Battalion of the Gold Coast Regiment is stationed here and all day long troops are being drilled, bugles sound, and one hears the sharp words of command. Were it not for the heat and 'colour' one could imagine oneself in an English garrison town.

"We are going to establish a Botanic Station here next year in the hope of encouraging the Ashantis to adopt agricultural pursuits in place of their risings, executions, etc., and still further alter the condition of affairs. I have come up to select a site for the Station, and have got my eye on a rich piece of forest land within a mile of Kumasi through which a 'gurgling brook' flows. The district round about is wonderfully fertile, but little is grown beyond the ordinary native crops. A Kew man as Curator will, I am sure, very soon alter the state of affairs. [Mr. K. G. Burbridge has since gone to Kumasi.] Once get the Ashantis to form plantations of Cocoa, Rubber, etc., and we shall have no more 'punitive expeditions.'

"Previous to my visiting Kumasi, I was travelling in the Cape Coast district to inspect land for a Botanic Station which we propose to open there in 1907. As soon as I have located the Station site here, I return to inspect the Tarkwa Botanic Station. By the way, I saw Anderson when I passed through to Kumasi; he was looking very well and seemed contented."

Mr. JOHN DUNCAN writes June 12, 1906 :— "Your letter from Kew was greatly appreciated and opened up, I assure you, a whole world of pleasant thoughts and memories. My home has been in Kentucky since 1870, the year in which I left Kew. Ever since, my work has been teaching and writing, and whilst I have had occasional glimpses of old Kew between then and now, they have only been poor glimpses, so that nothing much has been learned of what was going on and I knew nothing whatever of your Guild. You will thus gather how great was the satisfaction your communication brought.

"My story since making a home in these parts is too long to be even barely outlined at present. I have never been really out of harness a day since my arrival, either teaching or editing, and along those lines my work has taken me in a most agreeable way at various times all over the different States. I send you copies of the two papers I now mainly write for regularly ('The Louisville Evening Post' and 'Home and Farm'); my employment on them gives me about all I can do. I write all the editorials in 'Home and Farm,' also the answers to correspondents. The paper is issued on the first and middle of each month, and has a circulation of over 110,000 copies.

"My address is Anchorage, Kentucky. This is one of the prettiest suburbs of Louisville. I am living on a farm of about nine acres, and you must think of me as nearly 63 years of age and most happily married for over twenty years."

Mr. Duncan was, in his time, foreman of the herbaceous ground at Kew.

MR. H. B. LLOYD writes from Kelowna, Okanagan Lake, B.C., Canada:—"I have now been some considerable time in Canada, and do not regret settling in this country, which has well been termed a 'Poor Man's Paradise.' One has at first to go through pretty rough water, but this tends to make one hard and fit. Since being in this district I have been very successful and have now a good fruit ranche, which will give me good returns in a few years' time.

"The Okanagan Valley is most suitable for fruit-growing, especially Apples; still, the industry, although it has now passed through its experimental stage, is yet in its infancy. The collection of fruit sent from here to compete in the Colonial Exhibition held by the Royal Horticultural Society won premier honours and gold medal. This speaks for the quality of the fruit, the quantity one has to see personally to know what an ideal land this is for the fruit-grower. I received the *Journal* with the greatest pleasure and was glad to learn about old Kew friends and their advancement; all of them I trust will still keep hustling."

MR. A. J. JORDAN.—This is the last letter we received from Mr. Jordan, it is dated from Govt. Gardens, St. Ann's, Trinidad, 13th Feb. 1906.—"I was glad to get the *Journal* by last mail and to see that Mr. Brooks had written you from this side. He seems to have been the only one to do so.

"I spent six months in Antigua before coming here, but this only gave me time to gather up the threads of the work and make a few plans. Antigua is a very dry, difficult place from an Agricultural or Horticultural standpoint, and I am very glad that I accepted my present appointment, for much of the authority connected with the office of Curator in Mr. Sands' time had been transferred elsewhere.

"I had a very pleasant journey from there to Trinidad in August. The steamer passed Montserrat at night, so I was not able to have a glimpse of the plants I had almost got to love as children. [Mr. Jordan had been Curator of the Botanic Station etc. at Montserrat from 1899 to 1905.] At midday on the 24th I landed at Dominica and went straight to the Gardens. I found Mr. Jones busy as usual, slightly stouter and hair showing grey in places, but otherwise the same as when I stopped at Dominica on my way to Montserrat six years before. The gardens were a dream. That is the only way I can express what I felt. All the plants were full of vigour, from the trees downwards, and the place generally in excellent order. I am glad that Jones is a Kew man.

"In the afternoon I rode to the Agricultural School and was introduced to Mr. Brooks. The school and gardens looked well, but the boys were on holiday, so I did not see them. I dined with Mr. Jones and the evening was spent chatting of Kew and Kew men. I was able to give a little information, for although I have not been home since I first came out I had spent a week with Mr. Jackson [1905, of Antigua], and of course the subject when Kew men get together abroad had been the theme of our 'confabs.' The next day was spent at St. Lucia, or rather part of the day. I met Mr. and Mrs. Moore who were on the lookout for me, and had a walk round the Botanic Station. On Sunday at two o'clock we steamed from Barbados, where we had stopped from Saturday morning, and came direct to Trinidad. I was rather sorry for this as I had hoped to visit St. Vincent, Grenada, and Tobago. Ι had been told that I was wanted at Trinidad to try and get the gardens into better condition, but I was not prepared to find things as they were. The lawns had the same appearance as a hay-field ready to cut. We have a lot of things planted in various parts of the ground which, according to an old coolie who has been here for 30 years, 'came from Kew side,' but as the place has not been troubled about since poor Lunt left, the labels have decayed and no one knows what they are."

MR. W. ROBSON writes from the Botanic Station, Montserrat, W.I., 28th October :—" My first week's experience of heat, mosquitoes, and thirst in Dominica did not favourably impress me, but I am glad to say this little island is more breezy, has an ample supply of cool water, and malaria is unknown.

"You have heard so much from other Kewites about the general conditions that prevail in the West Indies that I need not go over old ground. I think no one need be afraid of the climate if he takes due care of himself, and one soon becomes inured to the heat. There are families here that have been in the island for three and four generations.

"First and foremost a man must take a practical interest in agriculture, and this necessitates a good deal of reading and thinking on first arriving. Planters as a rule are pretty hard-headed, and the incapable man is not going to make much impression. The work is in no way monotonous, in fact its varied character makes it attractive. One of the chief causes of anxiety to anyone having responsibility, is the unreliability of the black or coloured man, and if anything important is to be done one has to be on the spot.

"Our garden is of small pretensions and is chiefly experimental. There are two smaller stations out in the country for the same purpose. Insect pests are a sore trial to the planter. The Lime-tree (*Citrus*) is attacked by innumerable scale-insects, and the Cotton-plant by caterpillars which, if not checked, will soon eat off a field of Cotton. A man ought to have as thorough a knowledge as possible of operations such as spraying, budding, grafting and manuring, before coming out.

"I was rather disappointed in the flora and have not seen many plants of a highly ornamental character outside gardens, and have certainly had no 'finds' for Kew. Tree-ferns are of course a feature of the mountains, and a virgin forest is something of peculiar interest to the Englishman. It rains sometimes, too, as for instance the other day when we had five inches in a couple of hours. This plays terrible havoc with the roads.

"My work necessitates a good deal of riding and driving. You cannot walk very far in this climate without fatigue, so you ride as much as possible. My house is in the garden and I have a couple of servants to attend to my bodily comfort. Living is cheap here, meat and vegetables being especially so. Social life is pleasant enough, and tennis, shooting, and other things give a little recreation."

MR. G. H. WEIGT writes from the Agricultural College, Piracicaba, Brazil, Oct. 22, 1906 :—" After having been eleven months at the Horto Botanico, S. Paulo, I have been sent by the Minister of Agriculture to take up important duties at the new Agricultural College at Piracicaba, the most picturesque town in the interior of the State of S. Paulo. Coming here from S. Paulo I had to change trains at Jundiahy. This is the station through which pretty nearly all the Coffee that is grown in the State has to pass on its way to Santos. This year's crop has been a good one, and train after train passes through loaded with nothing but Coffee. The warehouses are all full, and the coffee-bags are piled up in thousands at some of the stations. At Capivary the first large plantations begin, and from there one can travel forty hours by train and see hardly anything else but Coffee and Sugar-cane.

"The town of Piracicaba has about 16,000 inhabitants, the streets are very hilly but in excellent condition. In the centre of the town is an old fashioned public park with fine trees. Among them are tremendous specimens of *Dillenia indica*, which seeds here very freely, and is an excellent shade tree; there are also very fine specimens of *Oreodoxa regia* and a number of *Colvillea racemosa*, very pretty when in bloom. *Ficus Parcelli* looks well all the year round.

"Adjoining the town is the river Piracicaba; it is about as wide as

the Thames at Richmond, and here forms the picturesque waterfall whose immense power supplies the town with electric light and drives the machinery of one of the most important sugar-mills in the State.

"Piracicaba is the place where the youth of Brazil are to receive their education in Agriculture and Horticulture. A college has been in existence many years, but is being superseded by a new one which has been in course of construction during the past year and is a palatial building. Its length is 100 metres.

"In connection with the 'Escola Agricola' is the 'Fazenda Modelo' (Model estate), where the most up-to-date American machinery and implements are in use. Rice, Corn, Beans, Potatos, Sweet potatos (Ipomœa), Coffee and Cotton are the main crops.

"My position is that of Director of the Botanic Park, now in course of construction. Plant-life begins to start now. At present thousands of *Tecoma chrysantha* are in bloom. It often climbs over very high trees and covers them with lovely yellow flowers. Close by you will see the pretty *Petræa volubilis* with dark blue flowers in abundance, and down in the swamps—towards the 'Serra dor Mar'—the gorgeous *Erythrina Crista-Galli* is loaded with flowers. Orchids are, of course, in abundance.

"If any Kewite would like to communicate with me I should be glad of it, also to exchange seeds."

INDIA.

(A Lecture given by the Director to the Mutual Improvement Society, Oct. 12, 1906.)

WHEN one thinks of India one thinks of a large subject. Some people write articles in newspapers, others write books that run to many pages, and then do not say all that can be said about India. I think many people in this country do not realize at all what India is. Even in these articles and books you sometimes find India spoken of as a country and the Indians as a people. India is really a continent just as Europe is, packed with peoples just as Europe is; perhaps there are more peoples, talking more languages, in India than in Europe.

Politically, India is divided into three Presidencies—Madras in the South, Bombay in the West, the great Bengal Presidency taking in the whole of Northern India. The Madras Presidency with its governor is not unlike the Madras of old days when it was the premier presidency. Bombay also with its governor keeps much the position it had when Bombay Castle came to England as part of the dowry of Catherine of Braganza and was the seat of our power in Western India. But the Presidency of Bengal has changed. Its Governor is now a Viceroy, Governor General of all India, and it has grown so much that it now includes a number of provinces, mostly with Lieutenant Governors.

THE GARDENS OF INDIA.

The places that will interest you most are those where there are gardening centres. First comes Calcutta in Bengal with a Royal Garden almost as large as Kew. The next most important centre is Saharanpur. The garden there is, perhaps, older than Kew, taking Kew as dating from 1759; it is certainly older than Calcutta, which dates from 1786; for the Saharanpur garden was set aside as a public garden by a native ruler early in the 18th century. As a botanical garden it only dates from the early part of the 19th century. There are now a number of other gardens with Kew men in charge. There is one at Allahabad, one at Lucknow, one at Agra; more recently others have been established at Cawnpur, Fyzabad, and Delhi. In Bengal, besides the Calcutta garden, there is one, a temperate garden, at Darjeeling. Besides these two gardens, there are in Bengal the Cinchona plantations, where four or five Kew men are employed. In the Punjab there is a garden at Lahore, the capital of the province, and one at Simla, the summer capital of the Indian Government. Far south of Cawnpur, in the Central Provinces, there is a garden at Nagpur. In Madras there is a Government Garden at Ootacamund in the Nilgiri Hills, and a Kew man has charge of the Agri-Horticultural Society's garden in Madras itself. In one Southern Native state, at Bangalore in Mysore, there is a famous garden. In Bombay there is a scarcity of gardens, but an Old Kew man quite recently was appointed to the Government Garden at Poona, the summer capital of the Presidency.

CLIMATE.

When you look at the map you see that India lies between two seas -the Arabian Sea on the west, the Bay of Bengal on the east. When the south-west monsoon blows, volumes of vapour roll up from these seas and, striking the mountainous Western and Eastern Ghauts, precipitate a heavy rainfall along both coasts. Between the two lines of hills the fall of rain is less, but along the northern line of the Himalayan mountains we again have a heavy rainfall. Thus then we get three rainy tracts, all mountainous or hilly and all covered naturally with thick forest. Along the Western Ghauts the rainfall is at times 240 inches a year. Along the Eastern Ghauts it is, perhaps, half as much or even less. Along the Himalaya the rainfall varies. In the west on the outer hills it is less than on the Eastern Ghauts, as we go east it increases, and when we get to Bhutan it is as great as on the Western Ghauts. Further east still, in the Khasia Hills, there is one place where the fall may be 600 inches a year. This place, Cherrapungi, is at the south edge of a plateau which here rises, almost like a wall, sheer from the Megna plain, and catches the first brunt of the wet winds from the Bay of Bengal.

The rainfall, however, often varies locally. The rain-gauge at Cherra-

pungi, which registers 600 inches, is near the edge of the cliffs. A mile and a half away another rain-gauge registers only 450 inches. Shillong, 30 miles away, about the same height (4500 feet) as Cherrapungi above the sea, with only an elevation reaching 6000 feet intervening, has about 80 inches. In the Western Himalaya conditions are the same; Naini Tal has about 90 inches; Almora, not far off, has 35.

Leaving these rainy tracts, we find, taking first their direct opposite, in North-western India-Scinde, Rajputana, and the Southern Punjaba practically desert area with a rainfall of from half an inch to five inches. Like many other deserts this tract is not quite without plants. But the plants that one meets often have little in the way of leaves, sometimes none at all, and often are strongly scented, being charged with essential oils. There are no forests and there is no sward. Between the two wet coast-belts there is a great dry but not desert triangle of mostly elevated plateau-country with ranges of hills. Here the rainfall varies from 20 to 50 inches; we often get forests, especially on the hills, but they are on the whole drier and opener, often scrubby, and when they extend to flatter ground are sometimes open with parklike glades, and with a green sward in the rainy season. North of this great plateau, between it and the Himalayas, lies the great Gangetic Plain. The upper part of this is, as regards its grass, like the highlands to the south. Except in places it has only an annual turf; in the hot weather the plain is dry, dusty and desert-like. The lower part of the plain, which includes Bengal proper and the Gangetic delta, has a turf that is persistent, but it is composed of coarse native grasses and is not beautiful like our fine English turf.

THE NATIVE RACES.

Another very practical subdivision of India is that with regard to the peoples who inhabit the continent. All through the north of India we have peoples who, like ourselves, are Aryans. They talk languages derived from Sanscrit, just as the languages of South-western Europe are derived from Latin. Their tongues are kindred tongues, just as Italian and Spanish are. But when we get to the south of India we find peoples that are not Aryan but Dravidian, with again many languages bearing no relationship to those of Northern India. In the Central highlands of India there are yet other peoples of Kolarian race, with other tongues unlike in structure to the Aryan or to the Dravidian ones. In the North-east of India there are still other peoples, with yet other tongues often allied to each other but differing in structure alike from the Aryan or Dravidian or Kolarian ones.

Now when any of you go out to India you will find it repay you to master the language or dialect of the district in which you live. But if promotion brings with it a transfer, you may find the language which it has taken you some trouble to master is not of much use to you. But if here you have a difficulty to contend with, there is a way of getting over it. There is a curious tongue, which is spoken over nearly the whole of India. This you will have to master. The name of this tongue is Hindustani, you will find it

A LINGUA FRANCA

that will take you practically everywhere. How, you will ask, should such a language have arisen? To explain it I have to ask you to remember that apart from political divisions, apart from natural areas, apart from differences in people and in speech, India has to be subdivided according to religions. There are, in practically every province, Hindus and Mussulmans, and these comprise the bulk of the people. This division is not racial; a Punjabi, a Bengali, a Madrassi may be either. In one way the Mahomedans, the followers of the prophet, are those you will feel most at home with, for they allow that your religion has a holy book, and if they think the Bible inferior to the Koran they at any rate admit that it is a Bible. The Hindus you will find just as pleasant people to deal with, but there cannot help occurring times when one is conscious that to a good Hindu we are people who are in a religious sense very impure, holding beliefs that to their thinking are very inferior. But these difficulties need never be acute, for the natives of India, whatever their race or belief, are innately well-bred people and rarely obtrude their sincere convictions disagreeably. They deserve corresponding consideration from us.

The emperors of India who ruled in Delhi were Mahomedans. The first of the great Mogul line which reigned there was Baber, the ruler of Cabul, who invaded and conquered a considerable part of India. The dynasty he founded was one of the most remarkable for the number of great men it produced that has reigned anywhere. But all through its early history it illustrated the law of the survival of the fittest. Usually an emperor left several sons, and the ablest of these was successful in killing off the rest. The last great ruler of the line was Aurungzebe who, having established his rule, became pious. The preceding emperors as a rule had been wonderfully tolerant; Aurungzebe had a more serious, perhaps narrower, mind and a conscience of nonconformist severity. His ambition was that India should become wholly Mahomedan. His policy involved him in war which lasted for about forty years. In his camp the bulk of his soldiery spoke Hindi or some other vernacular, and if they could write at all used a script that like our own runs from left to right. But his officers and those who looked after the payment of the troops used Persian, which was the court language, where the script runs from right to left. The difficulty that resulted in getting the different people to understand each other or their officers led to the evolution of a lingua franca or "pidgeon" tongue, the basis of which was Hindi, but with words from other vernaculars and from Persian and Arabic besides, which was intelligible to all. The convenience of this kind of speech has led to its general adoption since.

The country in different parts of India is not necessarily now as it always has been. Almost desert tracts in the Punjab with now only a few often scrubby trees, were under dense forest when Alexander fought against Porus over two thousand years ago. Even as late as the time of the first Mogul, as the memoirs which Baber has left us show, the Rhinoceros was hunted at the foot of the Punjab Himalaya, the extreme north-west. Now we have to go to Assam to get the Rhinoceros.

SEASONS.

The year, as regards weather, is divided into three rather definite seasons all over India. Pleasantest of all is the cold weather. This is followed by the hot weather, of which you could form some slight conception during the short heat wave of September last. When the hot weather has pretty well exhausted us, we get some relief when the monsoon begins to blow from the south-west. At Calcutta, as all over Eastern India, the monsoon begins about the middle of June. What remains of June is quite pleasant, for the temperature falls 20° to 25° F. when the rains begin. The relief after the preceding hot season is grateful and comforting. The rains go on during July not unpleasantly, but by August we get "breaks" in the rains, clear days with bright skies and strong sunshine. The atmosphere is all the while very humid indeed, not unlike that in the Palm House. In September there are more and longer breaks and the weather is-well, disagreeable. In October the cold weather should begin, at all events the "signs" of the cold weather come. We were then always on the watch for the first wagtail. When the wagtails arrived we felt that the cold weather was on its way. In Upper India the cold weather is longer and colder, warm and pleasant in the daytime, but chilly enough for a fire in the evening. In the Punjab it is still longer, still colder and still more pleasant. There is one drawback there; you may have three or four European seasons crowded into each 24 hours. Camping in the Punjab, we have got up at dawn to find we had sometimes to break a thin sheet of ice in our washhand basins which were filled the evening before. Bv midday we had all the feeling of a hot, dry summer day at home. There is a sudden drop in temperature at sundown, and when you are newly out from home you must guard carefully then against chills. Old Indians are prepared for this and keep their overcoats within reach.

The hot weather in Upper India has higher temperatures than Calcutta; 110° to 112° in the shade causes no surprise. Further west, in the Southern Punjab and Scinde, the temperatures run higher still, and may go to 127° . But there, as I told you, the rainfall may be only half an inch a year and the air is dry. A temperature of 96° at Calcutta, with a saturated atmosphere, is really more trying than one of 127° at Sukkur where the air is almost dry.

In the hot weather you cannot grow European plants, or many plants,

at all; in the rains you can only grow plants that are natives of hot moist countries. In the cold weather one of your objects will be to grow, as annuals, plants that are familiar in English gardens. We did our best then to grow Wallflowers and Stocks and Violets and other such things, not that we could grow them well, or grow them easily, but that they reminded us of home. These we could only grow at all in the cold weather corresponding to our winter. Once in North Bengal I found myself in a district where the staple rains crops were Rice and Jute and such things as will only grow in a rainy country and in a rice-swamp. But in the cold season I found these people growing as garden crops a small Mallow-a weed to us but to them a sort of vegetable; a Cabbagemustard; a small Chrysanthemum from the seeds of which they obtained an oil. They also grew Ramie and various other plants, all requiring some care. But these crops in their gardens were all crops that one met with nowhere else in India, and all crops that needed as much care as we have to give to our own cold weather flowers that we grow because they are home flowers. It struck me therefore that these crops too, even if the people did not know it, must be things their ancestors had brought with them when they migrated into India. As all the unusual plants are Chinese, I could not help feeling that originally this race had come over the north-eastern border from China. It turns out now that, by the measurements of their heads, these people, though they speak an Aryan language and are Indian by religion, are rather of Mongoloid race.

THE "INDIAN DAY."

The Indian day, so often spoken of as the "long, long Indian day," is not really, as this might make you think, a wearisome day at all. It is, as a rule, a busy day. In India you will get up very early in the morning. My own day at Calcutta was somewhat like this: 6 A.M. to 9 A.M. in the garden; at 9 post arrived and letters were gone through till office began at 10, when work was given to the various departments concerned. Breakfast followed at 11. From 12 till 3 office work filled one's time; post was then despatched, and after 3 came work in the herbarium. This filled the time till dusk; then dinner, then to rest with the comfortable feeling of being glad to get to bed. In Upper India it is much the same, though there it is usual in the hot weather after breakfast, which is not taken till noon, to rest in a cool dark room during the two hottest hours of the afternoon, beginning work again when it is rather cooler.

But though the day is pretty well filled, there is time too for reading and other recreations of various kinds. It is a great advantage when one goes to India to take with one or to develope there, a hobby. Your hobby may be work, but on the whole it is better in most cases that be something apart from your work.

One thing I would like you to be careful to do before you start, if

you go to India: see that your teeth are in a good state. Unless you have sound teeth you will not be able to masticate your food thoroughly; indigestion will follow; your health will go down, and you will be more liable to any infection that may be about. Be careful, all of you, before you go to any tropical country to see that your teeth are right.

As to clothes: don't worry about getting what is called a tropical outfit. You may take one thin suit if you like, but do not omit to take all the clothes you happen to possess. India is a good place in which to wear out old things. There is in the cold weather so great a difference between night and day temperature that you are wise to put on warmer clothes as evening falls. Take your overcoat with you. Even in the hot weather you may need it. For at that season you will find that thunderstorms occasionally occur, and although they do not last long one of their features is that the temperature, stifling when they start, often drops 20° when the rain begins, and if you are not careful you may easily get a chill. When I say that you need not take much thin clothing to India, I do not mean that you will not require it. You will require it, but it can be had locally, more suitable to the climate and at a more reasonable price than in this country.

VENEZUELA.

ALTHOUGH every country has its own peculiar attractions to the sight-seer, probably no part of the world is more full of interest in its historical associations and natural features than the West Indies and the Spanish Main. Of the former I did not see as much as I could have wished. On my way out I had only one day at Barbados and two at Trinidad, where I had the pleasure of meeting my two chums of Kew days. Leslie and Jordan-the last time, as it proved, that I was to see the latter. On my way home I visited Willemstad, Curaçoa-an extremely quaint and flourishing town in an almost rainless islandalso the old Spanish town of Cartagena in Colombia. From there I crossed to Galveston and spent a week in Texas. To tell you about these would require too much space, so I must confine myself to Venezuela. This is a country of the most varied character. The first sight which greets the visitor on approaching La Guayra, the principal port, is a range of mountains rising precipitously from the water's edge to a height of more than 8000 feet. Viewed from the harbour the houses appear to be in danger of slipping into the sea. I found it a most difficult matter to get up to those situated highest on the hill-side. From La Guavra to Caracas, which lies on the other side of this range. is a distance of seven miles, but by rail it is twenty-three. Not only is the railway interesting as being a piece of clever engineering, but it also has an interesting history. It is said to have cost about £40,000 per mile. When first built the people did not use it sufficiently to

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please Guzman Blanco, then President of the Republic, who is said to have held a large number of the shares. To get over this difficulty the enterprising president sent his soldiers and destroyed the cart-road, the only other means of transit between the two towns.

The railway follows for the greater part the contour of the mountainside, sometimes running up a deep ravine to a curve sufficiently sharp to startle the most experienced traveller, and sometimes winding around the brow of a projecting abutment, from which can be seen two or three sections of the line below, and still lower the red roofs of the town and the cocca-nut groves by the edge of the sea.

At one point it is said that the depth of the cliff below the railway is nearly 1000 ft. Except in the numerous deep gullies, the vegetation on the northern slopes consists mainly of Agaves, Furcreas, and Cereus. Aloe barbadensis is also seen here and there. This xerophytic kind of vegetation also covers the table-land of Barquisimeto, but here, although the Agaves are missing, it is more varied than behind La Guayra. In addition to the Cereus of erect growth are others with the straggling habit of C. triangularis; also Phyllocactus, Opuntia Toona, O. inermis, O. spinosissima and other succulent plants, all growing together. What strikes one most forcibly in Venezuela are the sudden transitions from one kind of scenery to another. At Barquisimeto, which stands on the banks of the Rio Grande in the west of the country, one may pass in a walk of half a mile from the hills covered everywhere with the plants mentioned above, into one of the most fertile and lovely valleys in the world. The same contrast may be seen in the valley of Caracas.

THE TOWNS OF VENEZUELA

are laid out on the American plan, the streets running from north to south and from east to west. To a European this is apt to prove very monotonous. The walls of most of the buildings are made of adobe bricks, and on account of the severe earthquake shocks to which the country is subject, the houses are not raised more than one story from the ground. The streets are roughly paved and often not paved at all; most of them are too narrow to allow any shade-trees being planted, aud as the windows are invariably guarded by iron or wooden bars in front, the residential streets wear a very dismal appearance. \mathbf{At} Caracas some compensation is found for this in the pleasant plazas in the centre of the town, where one also finds some very imposing buildings. The Capitol in particular is very fine; it is built in a Spanish-Moorish style of architecture and encloses a garden in which are two of the best specimens of Araucaria Bidwillii I have seen. The gardens generally owe more to the extremely mild and favourable climate than to attention on the part of the people.

The Venezuelans seem to take pains to preserve the memory of the great men of the country, as every square and garden has its statue of some more or less famous warrior or statesman. This is probably due

as much to the fact that they are really an art-loving people, as to their national vanity. The civilisation of which they are so proud cannot but appear very superficial to any foreigner who has seen outside of Caracas. At the brilliant fête of New Year's Eve the Plaza Bolivar was decorated with flags bearing the legend Pax y Progresso. One goes into the country and finds plantations abandoned, machinery lying broken and idle, and the people without any incentive to work beyond that of supplying their present needs. After seeing this, the effect of revolution and of the monopolies and exactions of those in power, the cry of "peace and progress" seems a little hypocritical. Of course it is not good policy to express such an opinion to the people. Their own courtesy is simply overwhelming. A comparative stranger will offer you the use of his house, his horse, etc., and at the same time be most surprised if you show any sign of accepting. When two gentlemen friends meet, they generally embrace and clap each other on the back. Another thing which surprises the visitor to Venezuela are the vast numbers and youthfulness of the generals and colonels whom he meets; he, however, soon finds out the true value of these titles. Morally as well as politically the tone of the people is low. In the country districts religion has fallen to the level of superstition. Amongst the péones a mutual arrangement or compromisso usually takes the place of marriage. Their Sundays are mostly passed in cock-fighting. There is a bull-ring at Caracas, and judging from the number and enthusiasm of the people at the fight on Dec. 31, this appears to be a favourite pastime there.

My work in Venezuela lay in the valley of the Aroa. A narrowgauge (2 ft.) railway runs up the centre, the men employed on the line being practically the only inhabitants. A dense forest fills the whole valley, and in order to locate the alluvial ground, streams, etc., it was necessary to cut paths at right angles to the line at intervals of 5 kilometres. At the best we could never do more than 4 miles per day. Needless to say I did not burden myself with much baggage. At night we built a shelter with the leaves of the Moriche Palm, laid some of them on the ground with a rug on top, and slept as well as on a springmattress. We were only once troubled by a "tigre," and the mosquitoes fortunately had kept us awake so that we had a good fire going. The wonders of

A VIRGIN TROPICAL FOREST

must be seen to be appreciated. Monkeys, parrots, macaws, wild pigs, and snakes abound. Tapirs, sloths, and a great many animals unknown to me are also common. Of the trees the largest are the Silk Cottons and the Samán. Mahogany, Cedar (*Cedrela odorata*), Lignum Vitæ, and many other lesser known timbers grow in various parts of the valley. Of the flowering plants of the forest the Browneas are by far the most brilliant. Here I only saw one small Orchid, although the branches overhead are everywhere clothed with Bromeliads, Spanish

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Moss, Rhipsalis, and other epiphytal plants. In the drier zone, however, at the head of the valley, between the forest proper and the arid region of the Cacti, the Cattleyas and Zygopetalums were magnificent. Growing on Mt. Carolina, which lies on the east of the valley, in company with Tree-Ferns, there is a remarkable species of Iriartea. This grows considerably over 100 ft. high, but the trunk ceases 10–12 ft. from the ground and is supported on a conical arrangement of stilt-like roots. Where this Palm is common it gives to the forest a most curious appearance.

In its agricultural and mineral resources Venezuela is one of the richest countries in the world. All sorts of soil exist as well as all sorts of climate, so that the products of temperate and tropical countries can be grown to perfection with equal facility. As is so often the case, however, in countries abundantly blessed by nature, there is very little prosperity among the people, nor will this come until a more stable and responsible government is established. When that takes place Venezuela will no doubt draw many European settlers and become a highly prosperous country. T. W. BROWN.

A LETTER FROM BRITISH CENTRAL AFRICA.

The Forestry and Botanical Dept., Zomba, B.C.A. July 20, 1906.

IN accordance with my promise, I now send you a few notes on my journey out here last January and February, and my impressions of British Central Africa.

Mombasa was the first place at which I saw a typical tropical vegetation. To me it was bewildering in all respects. The luxuriant growth, the profuse flowering of everything, and the gorgeous colouring were only less wonderful than the variety. The prominent things were the Cocoa-nuts, Baobabs, Bougainvilleas, Poinsettias, Allamandas, Aristolochias, Cassias, Cæsalpinias, Mangos, Bananas, and that king of tropical trees *Poinciana regia*—a living blaze of crimson. I [doubt if there is a more useful and beautiful tree for shade and avenues in the tropics. As a town Mombasa disappointed me. One would expect the chief port of the East coast and chief town of B.C.A. to be a model, as far as possible, but one finds streets of all lengths, widths, and shapes, twisting in all directions, many not more than six feet wide, and houses of all kinds jumbled up in every fashion.

Zanzibar is a large quaint town built in the characteristic Eastern fashion of narrow alleys and flat roofs. We had a short stop at Tanga in German East Africa—a small but model town, our chief call being at Dar-es-Salem, the chief town of the same colony. Chinde is a very hot dry port of no interest, being in a sand-pit and not a trace of solid path or road anywhere. I was glad to get away up the Zambesi on a river steamer. It is a noble river, being seven miles across in many places. I saw no crocodiles, but a large number of hippopotami. A delightful feature of the Upper Zambesi and the Shirè Rivers is the quantity of Borassus and *Hyphene rupicola* on either bank, in many places quite a forest of them, some probably 120 feet high. It is a pity that some check is not placed on the practice of beheading them to collect toddy which is pursued by the natives.

At Port Herald we transferred to the Shirè Highland Railway, of which 30 miles to Chiromo is open for traffic. Our arrival there was delayed on account of the line having been washed out by heavy rains in many places. I spent two days around Chiromo—a moist, hot, unhealthy place with a terribly high death-rate. In Chiromo as, indeed, all over B.C.A., everyone seems to have a wonderful faith in whisky.

The next stage of the journey was by house-boat, propelled by punting—ten niggers on each side, each armed with a long Bamboo. The river Shirè was delightful with its rich vegetation, its beautiful and varied bird and insect life. Still I was glad to commence

THE ASCENT INTO THE HIGHLANDS,

the cooler more bracing climate being very welcome. I reached Blantyre on Feb. 25, but found it not nearly so large as I had expected to find the chief and oldest town and commercial centre of B.C.A. to be. The streets are well planted with Eucalypti which thrive well. As, however, nearly all the species have glaucous leaves they give the town a grev aspect.

I arrived here (Zomba) on February 27th, exactly six weeks after leaving London. I found the country and my appointment far more satisfactory than I had anticipated. There are less than 500 European men in the country, and over one-fourth of these are officials

The altitudes vary from 100 to nearly 10,000 feet, and the climate is extremely varied. The districts below 2000 feet have an average annual rainfall of 36 inches, and a mean temperature for the year of 75° to 80° Fahr. In the Highlands, where the majority of the planters are settled, the annual rainfall may amount to 60 inches, with a mean temperature for the year of 65° to 70° , and extremes of 94° and 45° Fahr.

Coffee was for many years the chief product, but recently a general lowering of market prices has resulted in the area under Coffee being reduced. Tobacco culture is becoming popular; as the cultivation gives little trouble, large areas are suitable for the crop, and an excellent type is produced which finds a ready market in South Africa and the Transvaal. Cotton is rapidly coming out of the experimental stage and the exports are increasing rapidly; it will in time undoubtedly become the leading industry of the country.

Tea is grown experimentally on two estates, with great success, but as it takes five or six years to reach maturity, only planters with capital can hope to take up its culture on a large scale. The last remark applies more forcibly to Rubber. Para and Central American Rubbers are useless in all parts of B.C.A., but Ceara thrives excellently. Experiments on a few trees indicate that Rubber of an excellent quality can be obtained in fair quantities after seven or eight years.

Fibres are quite neglected, yet Sisal and Mauritius hemp could be grown with great success throughout the country; and, in many places, Ramie. There are several native fibres, but these cannot possibly compete with the leading classes now in demand. The planter is usually a man with little capital, and less knowledge of agriculture and horticulture. Returning from England, one of them saw a Sisal plantation in German East Africa and ascertained that it was a commercial success. He promptly wrote to the Administration, suggesting that steps be taken to introduce the plant, ignorant of the fact that it has been grown, for distribution, in the Zomba gardens for the last seven years or more.

Roads are not metalled, and

FEW STREAMS HAVE BRIDGES

to carry heavy vehicles; hence mechanical transport is impossible. Bullock waggons are useless during the rains, and in addition there is the dread of tse-tse-fly in some districts. The consequence is that all produce has to be carried to and from the rivers on the natives' heads a method that has every disadvantage. Given capital, initiative, and intelligence, good roads and bridges, and a railway to the coast, B.C.A. will prosper.

Vegetation is very varied in type, and rich in species, as might be inferred from the diversity of altitude and latitude. I am stationed amid a distinctly temperate flora at an elevation of from 5000-9000 feet, on Mount Mlanje. The only old friends I have come across are *Pteris aquilina* and *Osmunda regalis*, both very common.

The climate on Mlanje is as healthy as that of England, and the life suits me to perfection. I am about 50 miles from Zomba, and have a few neighbours on the plains, at from seven to thirty miles distance. Civilisation is very evident in Zomba. There are cricket, football, golf, hockey, rifle, and tennis clubs; a billiard room, reading room, reference and lending library; amateur theatrical, musical, and debating societies; a fine church, and no bars, hotels, or other allied curses of civilisation. Purves continues in excellent health, and hopes to visit the Old Country during 1907. E. W. Davy.

TRAVEL IN UGANDA.

THE stay-at-home Englishman, whose only experiences of travelling are journeys undertaken in a well-appointed railway-carriage, or in the now ubiquitous motor car, cannot readily understand the many difficulties not to say positive dangers, which the traveller in Tropical Africa has to encounter.

In the first place, except between stations, there are no real roads in Uganda, and consequently a bicycle cannot be much used. Horses are unable to withstand the climate, and mules are very uncertain in this respect. Bullocks are used for transport purposes to a certain extent, but as the most these animals seem to be able to traverse is about ten miles a day, it is impossible to use them when undertaking a journey of any length (even if roads exist), unless one is prepared to proceed very slowly. The most general method of travelling is, therefore, on foot.

An ordinary day's march along a road or beaten track is from 15 to 20 miles, but where no roads exist, it is often only possible to march five, or in dense forest even less than that. It will thus be seen that a journey of only 100 miles entails a considerable amount of forethought, and is quite an undertaking.

The traveller has to pack up food, clothing, and innumerable other articles in sufficient quantity to last the whole time. Then a number of porters must be obtained to carry them, and if the intended journey is likely to be through pathless country, or forest, it may be necessary to take a number of extra men sufficient to cut a track.

Everything being ready the loads are taken up by the porters, and the caravan starts off, generally with much singing and shouting, and with the white man at the head.

The first day's march is usually a short one, as the men are probably totally out of condition, and the white man also finds after ten miles of marching under a burning tropical sun, that he is quite ready to camp.

THE CAMPING-GROUND

having been reached, the first thing to be done is to get the tent pitched, and wood and water to hand for bathing and cooking purposes. Those who are inexperienced would be astonished at the quickness with which these things are accomplished, and a meal placed on the table by "boys" who have had but a few weeks' training. Having satisfied the wants of their master, the natives begin to look to their own comfort. The nearest local chief will be invited to bring food to sell, some of the men will go to cut sticks, others to pull grass, and in an incredibly short time they will have erected huts sufficient to keep themselves dry and warm during the night. The white man generally spends the remainder of the day in reading, shooting, or (if a Kewite) botanising, until dark, when he has his last meal for the day, and retires to bed. The native likes his big feed of the day just after dark, and after a great deal of chatting, singing, and dancing round the camp-fires, he too retires. The whole camp will now be quite quiet, everybody being probably too tired to be kept awake by thoughts of wild animals, or even by the roaring of lions, or the horrible yelping of hyænas just outside the camp fires.

The next morning everyone is astir before daybreak, and after the camp has been struck, and a hasty breakfast eaten, the march is resumed.

Such is an ordinary day's programme. It is, however, by no means monotonous, for, apart from the variations of scenery and vegetation, one may expect many more or less exciting experiences. One day the monotony may be broken by an encounter with some wild animal, or the discovery of a particularly interesting plant. Another day may be memorable as an exceedingly wet day, so wet that everything you possess is saturated, and not only this, but you find many usually insignificant streams have become so swollen that you have some difficulty in crossing. Then again there is that most exasperating occurrence which few have not experienced, that is a terrific thunderstorm in the middle of the night, which blows down the tent, and leaves one exposed en deshabillé to a tremendous storm, and before you can take any steps to prevent it, soaks the bed and everything through and through. I have recollections of such occurrences, as I have also of sleepless days and nights on account of mosquitoes, not to mention the dreaded tse-tse fly.

However, in spite of many worries, inconveniences, and not a few dangers, I must say I consider the life a very enjoyable one, but at the same time it is a life for which many are not suited, either in temperament or physique. To many it would seem a hard unsettled life, and to be cut off, perhaps for months together, from all intercourse with civilisation would be a trial indeed. E. BROWN.

A JOURNEY IN WEST AFRICA.

IN January last I accompanied, as botanist, an expedition sent out under the auspices of Liverpool University to the French and English West African Colonies. Our party consisted of a chemist, an entomologist, a Cocoa expert, and an ethnologist, Lord Mountmorres, who acted as leader.

Our first stop was at Dakar, in Senegal, an important coaling station for steamers proceeding to South America. We then went by rail over the desert to St. Louis, a military station at the mouth of the Senegal river. Subsequently we paid visits to the various centres of the great *Arachide* (ground-nut) industry, which is the chief source of revenue to the colony. At Rufisque, the main port for this product, some wonderful sights are to be seen. The ground is literally covered with huge piles of these nuts, and the jetty is crowded with sack-loads ready to be shipped to Marseilles. The nut is used in the manufacture of confectionery. The oil extracted is put on the market as the familiar "Olive Oil" of commerce. I spent a few days at an agronomic station to study the vegetation, but it happened to be the dry season and the time of the blinding "harmattan" winds from the Sahara. We had intended going up to Timbuctoo but the low state of the Senegal river did not permit.

Coming down the coast we put in at Bathurst, a very shabby English colony devoid of the luxuries of hotels, facilities of street travel, etc., which the French have provided at their flourishing sea-side resort of Dakar.

We next landed at Conakry, French Guinea, and here again the French have done wonders. It is a most beautiful town, probably the finest on the coast, laid out in broad shaded boulevards and public squares. An excellent system of rail-cars pushed by hand takes you to any part of the suburbs. There is also here a most luxurious botanic station. They are doing a good deal of work there with Para Rubber raised from their own seed. Going up to rail-head we reached Kindia, a large township which had sprung up in six months and boasts two hotels. All the "coast" houses have European representatives here,-French, English, and German. The chief trade is in rubber and gum, for which the natives take cloths, tin-trunks, gunpowder, and umbrellas. The Syrian, a despicable type, acts as the intermediary between the blacks and the whites. The natives prefer him to the European as he invites the black to drink with him and mix with his family. In this newly sprung-up town, reminding one of an American mining-camp, there was already a Syrian population of five hundred.

From Kindia we marched right across the colony, through the Foutah Jallon district. We had the greatest difficulty in procuring carriers, and they were continually bolting. On the return journey our troubles increased as our provisions entirely gave out. Fowls were not to be had, and in the emergency our leader enrolled us as members of the caravan, "porteurs volontaires," so that we were able to fall back on government rice rations. This seems a very

POOR PART OF AFRICA.

The chief thing is cattle, and of course Rubber (*Landolphia*). Of edible things there are Oranges in great plenty in the villages, but nothing else in the way of fruits. On the hills at 3000 feet the climate is delightful and the scenery very rugged and picturesque. The Foutahs, who are probably of Semitic origin, are quiet, self-respecting people in contrast to the unruly Sou-sous who composed our caravan.

Getting on to the steamer again we called at Sierra Leone, as well as Sherboro, and then went slowly down the Liberian coast, putting in at every port. Monrovia struck me as being a miserable sort of town. At Grand Bassa the Piassaba or Bass Fibre (*Raphia vinifera*) industry is greatly in evidence. Our party having split up at Sierra Leone, three of us spent a week on the Ivory Coast at Grand Bassam, from which place a great quantity of Mahogany is exported. The Governor sent a launch down to bring us up to Bingerville, the seat of government, and we visited various public works being carried on in the neighbourhood, notably a canal to connect the lagoon which stretches along the coast with the sea. The surf at Grand Bassam is very bad indeed.

Our last landing-place was Accra, and we spent two months in the Gold Coast Colony. Our sojourn was made very enjoyable through the hospitality of the King of Krobo (Conor Maté Kolé), in whose country most of our time was spent. He personally conducted us for several days through the plantations made by his people. It is a splendid agricultural district. The natives seem a very fine lot both at work and at play. Of course they have their weaknesses, the chief of which appear to be gin-drinking and in filling cheap guns, made of gas-pipes, with gunpowder and firing them off at all hours of the night. They spend immense sums on funeral custom. The richer the deceased the more palaver they make. Their explanation is that the more wealthy the man has been the more devils there are attacking him and all the more noise must be made to frighten them off, whereas the *poor* man is not troubled in his rest by so many evil spirits ! LEO FARMAR.

IN MEMORIAM.

FREDERICK WILLIAM BURBIDGE.

THE death of this gifted and widely esteemed Kewite on Christmas Eve 1905 was a shock to those who had seen him at Kew only a few weeks previously. His health, never very robust, had been severely shaken by the death of his wife a few months earlier; but he appeared to have recovered from the effects of that blow. He was buried in Dublin, where, as the genial and highly respected Curator of the Trinity College Gardens since 1879, he had won a large circle of friends. The University recognised his qualities by conferring on him in 1889, honoris causa, the degree of Master of Arts. In England Burbidge was much appreciated. No man excelled and few equalled him as a lecturer and writer about plants and gardening. His sympathies were with the workers, and if he did not take a prominent part in the recent movement to organise professional gardeners it was because he thought the preliminary effort might be left to younger men. Burbidge was not a botanist in the strict sense of the word, nor was he a cultivator-gardener of distinction; his strength lay in his knowledge of plant lore, in his worship of the beautiful in plants, and in his belief in gardening as an ennobling art. In all his discourses and writings these qualities were conspicuous, and whether one walked with him in the garden or talked with him by the fireside, Burbidge was essentially the horticultural

littérateur. He was the author of many books, the most useful being The Propagation and Improvement of Cultivated Plants, of which the late Mr. Gladstone publicly expressed his appreciation. His beautiful work on The Narcissus, for which he drew the plates, served to bring the genus into prominence, and his delightful book, Gardens of the Sun, told of his experiences and discoveries in Borneo, whither he went as collector for Messrs. J. Veitch & Sons in 1877–8. He contributed several interesting articles to the Guild Journal. As a writer and draughtsman for the horticultural press Burbidge displayed marked ability, not so much by the things he said as by the manner of his saying them. There was something of the nature of Richard Jefferies with a flavour of Ruskin in his way of seeing and talking about men and flowers.

Burbidge entered Kew in 1868, when he was 21 years old, and left in 1870 to join Mr. W. Robinson on the editorial staff of The Garden. Before coming to Kew he worked for a time in the Chiswick Gardens of the R. H. S. After his appointment to the Dublin post he never missed spending annually a week or so at Kew, where he devoted the day to wandering about among the collections, note-book in hand, his broad, strongly built figure and clever, good-looking hairless face with a pair of the richest sparkling brown eyes suggesting the happy monk endowed with a love of nature. In the evening, over a glass and pipe, he enjoyed to talk in his own inimitable way about the things that interested him. Although widely dissimilar, yet there was something of the same nature in F. W. Burbidge and Shirley Hibberd. They were both book-men, clever in many ways, and shining lights in horticulture. And they both knew how to appreciate Kew. W. W.

JOHN MAHON (BROWNE).

In 1891 a smart, black-haired young Irishman came to Kew from Dundrum, Dublin, with a letter of recommendation from F. W. Burbidge, who had accidentally discovered John Browne, as he was then called, and advised him to go to Kew. It was good advice, for Browne proved to be of the right sort. Possessing a keen love of plants and gardening, a student's love of knowledge, an honest, manly character and an independent mind, he quickly developed into a most useful and reliable officer and a pleasant companionable fellow. Every one liked him. He was one of the founders of the Guild and his contributions to the pages of its Journal are equal in interest and literary merit to anything it contains. His besetting sin was modesty. Many men with half his ability have got many times higher in the service than he did. "Friend. go up higher" does not always come as the reward of the man who is content to wait for the call; otherwise Mahon's great services would have met with recognition. He went to Africa in 1897, and in the following year the Guild Journal contained a delightfully written sketch by him of his first impressions of Tropical Africa. He worked splendidly in British Central Africa, as the herbarium and gardens here and the

records of his office there can testify. But no man can keep on doing his best in the absence of sympathy and encouragement, and Mahon, to use his own words, "cleared out from a place where any duffer got on at least as well as the conscientious worker." He tried to get employment in England, but finding nothing to his taste, he accepted a post in Uganda in 1901 as nominal assistant but actually Curator of the Botanic Garden He really made this garden and was in the full swing of in Entebbe. progressive work, as usual, however, on very unprogressive pay, when the deadly "sleeping sickness" struck him down. He was invalided home, where he first lost his reason, then rallied and did some work at Kew and the Imperial Institute, so that for a time there appeared to be a chance of his recovery. But, breaking down again, he placed himself under the treatment of Dr. Rose Bradford, F.R.S., at University College Hospital, where he died a slow painless death on April 6. He never whined about his complaint, although from the first development of its symptoms he asserted that nothing could save him. He had seen many of the natives die of this dreadful blood-poisoning in Uganda.

Mahon's love of Kew and all its associations was profound, and his belief in the value of the pioneering work of Kew men in the colonies was of a convincing character. But if he was modest, he had a healthy jealousy on behalf of his fellows and could put his finger on the sore place which caused discontent among Kew men in the Colonies and India.

Mahon had the poetic temperament. He loved music and pictures and he was a socialist. He took an interest in all branches of natural history, was a careful observer, and could talk in the most entertaining way about many things. W. W.

OLIVER TIETJENS HEMSLEY.

Mr. Hemsley was born at Richmond in Surrey on February 6, 1876, and died at Lahore, Punjab, January 6, 1906. It is our duty each year to have to record the loss of bright young lives laid down in the service of the Empire. For, with all its glory, this empire of ours takes a ceaseless and relentless toll of valuable human life. In the case of young Hemsley our sympathies are attracted in an especial degree, for he was an only son and his father is one of the most eminent and honoured members of our Guild. Not yet thirty years of age when he died, he was merely on the threshold of an exceptionally promising and useful career. He entered Kew in 1893 and passed through the usual training. Diligent in whatever manual work came to his hand, he also excelled in the mental part of his training as is shown by the records of the Garden lectures. In three of the courses he was 1st and in the other he was 2nd. It may also be mentioned that he was first to discover in Kew the rare fungus, Lepiota mastoidea. In June 1898 he went out to Calcutta as an assistant, but was soon transferred to the Cinchona Plantations at Mungpoo. Four years later he made another move to the Government Gardens at Lahore; here he remained till his death,

first as assistant, latterly as superintendent. His appointment to the full charge appears to have inaugurated a new era in the Lahore Gardens. He prepared plans for various improvements and additions, and obtained funds for carrying them out. In spite of unfavourable seasons he effected immense improvements and his work was highly commended by the Punjab Government, the local press, and by the Garden Committee. Hemsley belonged to the Punjab Light Horse, of which he was Quartermaster-Sergeant, and his funeral was a military one. As an indication of the esteem in which he was held at Lahore, it may be mentioned that a monument over his grave has been erected to his memory by public subscription "in special recognition of good work zealously performed." He left a widow and infant daughter.

A. J. JORDAN.

It was only in the last number of this Journal that we recorded the transference, during 1905, of Mr. Jordan from Montserrat to the Government House Gardens, Trinidad. It is now our mournful task to have to record his death at the early age of 33. Mr. W. Leslie, his fellow Kewite in Trinidad, was with him when he died. He writes us that Jordan had been ailing for about a week with fever, but although attended by a doctor, nothing serious was apprehended till the evening of August 5th. He then became rapidly worse and died the next morning. We have not been able to learn the birthplace or even the nationality of Mr. Jordan, but before coming to Kew he had been employed at Ballindean House, Perthshire. Afterwards he went to Mr. James Walker of Ham, and to Forbes House, Ham. He came to Kew in May 1898 and stayed a year, being then appointed Agricultural Instructor at Montserrat, W.I. He was subsequently made Curator of the Botanic Station in that island, and here he remained till Feb. 1905. when he left Montserrat for a short stay in Antigua to occupy a similar post. The same year he was transferred to Trinidad. Although it is now nearly eight years since he left Kew, Jordan has always been remembered for his prowess at the Mutual Improvement Society debates. Anyone who tried a fall with him usually came off second best, and some of his repartees are still quoted.

There is one matter which we think ought to be mentioned. We have on several occasions received complaints that the house in which Jordan and his predecessors at Trinidad had to live is damp, dark and unhealthy. We should, of course, be loth to suggest that this had anything to do with his untimely death, but it seems to us a disgraceful thing that, in addition to the unavoidable risks of tropical service, men should be made to live in unhealthy quarters.

PERCY THOMAS INGRAM.

Mr. Ingram was descended from a talented race of gardeners. His grandfather was the head gardener to the Royal Family at Frogmore in the early decades of the last century whose name is still remembered as

the raiser of the "British Queen" Strawberry, the "Royal George" Peach and other valuable fruits. Percy's father, William Ingram, was well known, first as head gardener at Hatfield and later at Belvoir Castle, and his mother was a skilful artist both in oils and watercolour. The son inherited a good deal of his parents' talent, but, unfortunately, ill-health and other circumstances prevented him from exercising his mental gifts to the extent they might have been under happier conditions. He was a clever British botanist, but his dreamy, poetic temperament was against his making any practical use of this or any other of his wide stores of knowledge. He published a volume of poems and philosophic essays, and some of his verses may be found in earlier numbers of the Journal. He came to Kew in April 1881 and left in February 1882. Before that he was employed in Chas. Turner's Nursery at Slough. He died at Grantham towards the end of August 1901, but it is only recently that we heard of his death through Mr. W. H. Divers of Belvoir Castle Gardens. His only sister died shortly after him, and as both were unmarried, this branch of the family has died out.

ROBERT SMITH BAXTER.

Mr. Baxter, who died of pneumonia at Putney in May last in his 52nd year, was the last surviving son of William Hart Baxter, and a grandson of William Baxter, who was head gardener of the Oxford Botanic Garden from 1813 to 1851, and the author of several botanical publications. Robert, after receiving his early training under his father (who, besides being head gardener of the Botanic Garden from 1851 to 1887, laid out "the Parks" as well as many gardens in the north of Oxford), spent some time at Kew, leaving there in March, 1874. After occupying several posts on the continent he returned to Oxford and acted as assistant to his father until the retirement of the latter. Shortly afterwards he severed his connection with the Botanic Gardens and started as a nurseryman in Oxford; but on this enterprise not proving successful, he obtained a situation at Barnes, which he held until his death. Thoroughly absorbed in his work and with a keen eye for the discrimination of plants (as was pointed out by one of his Kew contemporaries in the Gardeners' Chronicle in June, 1906, p. 411). he did not possess that faculty which makes for success, but rested content with plodding along. His hobby was the raising of new forms of Coleus. C. H. W.

BENJAMIN THOMAS JAMES.

We regret to learn from the wife of this Old Kewite that he died in Melbourne, Australia, on July 12th, 1906. He left Kew in January 1877, and subsequently became head gardener at Sandhill Park, Taunton, and afterwards at Marden, Hereford. About 1895 he emigrated to Australia and commenced as a nurseryman near Melbourne. Mrs. James tells us that he died after but three days' illness.

KEW STAFF (December 31, 1906).

(The names of Life-members are preceded by an asterisk.) Director*LtCol. D. Prain, F.R.S., M.B., I.M.S., etc	v. 5 8† 0†
Keeper of Herbarium and Library *William Botting Hemsley, F.R.S. 186 F.L.S.	0†
Principal Assistant (Phanerogams).Otto Stapf, Ph.D., F.L.S.189."""George Massee, F.L.S.189Assistant (Herbarium)Nicholas Edward Brown, A.L.S.187.""Charles Henry Wright, A.L.S.187.""Charles Henry Wright, A.L.S.187."""Charles Henry Wright, A.L.S.189."""Charles Henry Wright, A.L.S.187."""Charles Henry Wright, A.L.S.189.""""189.""""189.""""189.""""189.""""189.""""189.""""189.""""189.""""189.""""189.""""189.""""189.""""180.""""190.Preparer (Herbarium)""189.""""190.Preparer (Herbarium)""190.""""190.""""190.""""190.""""190."" <td>33942943832346495 +</td>	33942943832346495 +
Preparer George Badderly 188 Curator of the Gardens *William Watson, A.L.S. 187 Assistant Curator *William Jackson Bean. 188 Clerk of the Works Justin Allen 187 Foremen: *Walter Irving 188 Arboretum *William Dallimore 188 Tropical Department *Charles P. Raffill 186 Decorative Department *Arthur Osborn 186 Temperate House *William Taylor 190 Storekeeper *George Dear 188 Packer William J. Crisp 187	79 33† 79 90† 90† 90† 99† 99† 92† 34 96

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

† Entered as a young gardener.

SUB-FOREMEN.

Name.	Department.	Entered Kew	Previous Situation.
Adamson, J	Herbaceous	Jan. 1905	Southwick Ho., Dumfries, N.B.
*Blythman, T	Palm House	June 1902	Norwood, Alloa, N.B.
*Christie, J. S			
Dines, J. H	Propagating Pits.	Aug. 1902	Essex County Council, Chelmsford.
Dixon, J.	Arboretum	Aug. 1904	Tregothnan Gdns., Truro.
*Garnett, A	Tropical	Feb. 1903	Golden Orchard, Royston.
*Giles, J	Orchids	Jan. 1904	Spinfield Gns., Gt. Marlow.
Kidd, H	Temp. Ho. Pits	Apr. 1904	Ashfold Gdns., Handcross, Crawley.
*Long, F. R	Herbaceous	June 1905	Hillier & Sons, Winchester.
			Scone Place, Perth, N.B.

SUB-FOREMEN (continued).

Name.	Department.	Entered Kew.	Previous Situation.
*Moore, H. J	Decorative	May 1903	Thoresby Gdns., Ollerton
	1.2		Notts.
Purdom, W	Arboretum	Aug. 1902.	J. Veitch & Sons, Ltd.
Tunrington F	Temperate House	Feb 1905	Botanie Gardens Oxford

GARDENERS.

Mamo	Entered Kew.	Previous Situation.
Name.		
Aubrey, A. E	Dec. 1906	Hatfield House, Hatfield, Herts.
Bale, H	July 1906.	Forthampton Ct. Gdens., Tewkesbury.
Band, R	Apr. 1906	Berwick House Gardens, Shrewsbury.
Blackburn, A	Apr. 1906	Underscar, Keswick.
Butcher, F. H	Nov. 1905	Longleat Gardens, Warminster.
Cartwright, T	Nov. 1905.	Picton Castle Gardens, Haverfordwest.
Clacy, C. S	Jan. 1906	North Court, Finchampsted.
Close, A. W	Dec. 1906	Christowe, Minchinhampton, Stroud.
Cousins, F. G	June 1906	Maryfield House Gardens, Exeter.
Cowley, H.	Oct. 1905	Royal Gardens, Windsor.
Dodd, W. G	Nov. 1905	Berrow Court, Edgbaston.
Down, W. J	June 1905	Clock House, Forty Hill, Enfield.
Duley, A. E	Mar. 1906	Codicote Lodge, Welwyn, Herts.
Dunk, W	Feb. 1902	Trained at Kew.
Gammon, F	May 1905	Buxted Park Gardens, Uckfield.
Goodrich, W. J	Sept. 1906	Trained at Kew.
Greening, L	Sept. 1905	Trained at Kew.
Hardie, A.	Oct. 1906	View Mount, Stonehaven, N.B.
Harding, C	Oct. 1904	Titley Court, R.S.O., Hereford.
Holtom, F.	Aug. 1904	Old Gardens, Pines Road, Bickley, Kent.
Jennings, J.	Sept. 1906	Trained at Kew.
Joyce, R. J	Sept. 1906	Hyde Park, W.
Kett, R	Oct. 1904	Englefield Gardens, Reading.
Kidley, A. W	Feb. 1905	Sander & Sons, St. Albans.
Klein, F. A	Dec. 1906	Rasmussen's Nurseries, Enfield, N.
Lambert, J.	May 1905	Oak Lodge, Sevenoaks.
Little, W. B Logsdail, A. J	July 1906	Perkins & Sons, Northampton.
Logsdail, A. J.	Oct. 1906	Sweet's Nurseries, Whetstone, N.
Mayhew, C. W	Mar. 1906	Wheatlands, nr. Edenbridge.
McGregor, D.	Nov. 1905.	Wemyss House, Wemyss Bay, N.B.
Middleton, C. H	Dec. 1906	Dalham Hall, Newmarket.
Miles, A. C	Feb. 1906	Charlesworth & Co., Bradford.
Moosman, E.	Apr. 1906.	Ascott Gardens, Leighton Buzzard.
Morland, W. H	Apr. 1905	Botanic Gardens, Cambridge.
Newell, W.	Apr. 1905.	High Leigh Hall Gardens, Knutsford.
Ogle, A	Sept. 1906	Mr. Harrison's Gardens, Blackburn.
Oliver, T	Dec. 1906.	Drumlanrig, Thornhill, Dumfriesshire.
Papsdorf, P	Dec. 1906.	Woodland Nursery, Hampton.
Preston, F. G.	Aug. 1904.	Oatlands, Warborough, Wallingford.
Pyman, G. W	Dec. 1906.	High Street, Maldon.
Richardson, J	Oct. 1906.	BrackenburghT'wr,Calthwaite,Carlisle.
Stirling, E Stroud, E. G	Feb. 1906.	Letham Grange, Arbroath, N.B.
Stroud, E. G.	May 1905.	Wilton House, Salisbury, Wilts.
Thomas, E. K.	Apr. 1905.	Leighton Hall Gardens, Welshpool.
Tidy, A	Sept. 1905 Nov. 1905	J. Veitch & Sons, Ltd., Feltham.
Walden, F	Oct. 1905	Low & Co., Enfield. Sander & Sons St. Albana
Watkins, J. W	Feb. 1906.	Sander & Sons, St. Albans.
Watson, J. G.	Sept. 1905.	Welbeck Abbey Gardens, Worksop. Trained at Kew.
White, R	May 1906.	Warley Place Gdns., Gt. Warley, Essex
Woolley, H. M.	Jan. 1906.	Low & Co., Enfield.
	10000,1	

Name.	Left Kew.	Present Position and Address.
*Weigt, G. H Welker, Constant Weller, Walter	April 1905 June 1890 Feb. 1884.	Dir., Bot. Park, Piracicaba, Brazil. H. G., Château de Beauregard, Versailles.
Wendt, Hermann	Jan. 1894	Sumatra Tobacco Co., Langkot, Sumatra.
Westland, Alexander B Whipps, A. C.	April 1883 Mar. 1904	Menlo Park, California. Wickham Hall, West Wickham, Kent.
White, Alex. II.	Oct. 1902.	
White, Frederick J	April 1884. May 1876	H. G., Kirby Hall, Bedale.
White, William Whittle, Robert	Sept. 1882.	II. G., KIIDY Hall, Dedale.
Whytock, John	July 1901	H.G., Caprington Castle, Kilmarnock, N.B.
Wiggins, Thomas *Wigman, J. R	Oct. 1871 April 1895	H. G., Captain Ross, Dover. Curator, B. G., Surinam, Dutch Guiana.
Wilke, Johann F.	June 1880	Curator, Bot. Gardens, Rotterdam.
Wilkins, William	June 1898	Hyde Park, W.
Wilkinson, Charles Williams, Harry	Nov. 1889 Mar. 1896	H. G., Bradwell Grove, Burford, Oxford. H. G., Trevince, Redruth, Cornwall.
Williams, J. L.	Mar. 1906	Curator, Bot. Station, Lagos, W. Africa.
Williams, William	May 1888	Storeyard, Hyde Park, W.
Willison, Henry	Mar. 1902 Jan. 1906	Langley Court Gdns., Beckenham, Kent.
*Wilson, E. H	Jan. 1900	c/o Director, Arnold Arboretum, Jamaica Plain, Mass., U.S.A. (China).
Wise, William J.	May 1888	H. G., Redlands Court, Bristol.
Witcher, John	July 1887	Florist, Torriano Avenue, Camden Rd., Kentish Town.
*Witty, Henry	May 1883 April 1901	Supt., Parks etc., Hull. Gardener, Heaton Park, Prestwich, Man-
Wood, Harry	April 1901	chester.
Woodrow, G. Marshall	Jan. 1867	9 Crosbie Street, Maryhill, Glasgow.
Wright, George H Wright, Robert	June 1892. Dec. 1870	N., Kendal.
Wright, W. N	April 1900	Timothy & Sandwith, Horticultural Specialists, Bracknell, Berks.
Wüg, Ove E.	Feb. 1896. Dec. 1892	H. G., Lisle House, Bournemouth.
Wyatt, Frederick G *Wylie, James	Feb. 1882	Curator, Bot. Gdns., Durban, Natal.
Yeoward, Daniel	Aug. 1889 Oct. 1895	Curator, Bot. Station, Fiji. H. G., Postlip, Winchcombe, Cheltenham.
Young, Edwin C Young, John	Feb. 1883	Ellerslie Towers Gdn., Montpelier Road, Ealing.
Young, Richard J *Young, William H	Mar. 1890 Feb. 1890	Ashton Cottages, Restone Rd., Red Hill.

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