

## SIR WILLIAM JACKSON HOOKER.

(See *Frontispiece.*)

THE Royal Gardens, Kew, were the private property of the Royal Family until 1841, when, on the recommendation of a Parliamentary Committee of which Dr. Lindley was a member, they were handed over to the nation, to soon become the headquarters of botanical science, with Sir William Jackson Hooker as Director. When he was appointed, Kew was an ill-kept garden of some eleven acres with a few tumble-down houses; when he died, in 1865, he had transformed it into an Imperial botanical establishment of unrivalled interest and value, possessed of a garden and arboretum of about 250 acres, two magnificent glass structures—the Palm and Temperate Houses,—three richly stocked Museums, and a Herbarium and Library of exceptional extent and richness. He had also applied the resources of the establishment to the development of agriculture and horticulture in our Colonies and in India, and he had enriched botanical science by great and varied contributions to its literature.

To accomplish all this in twenty-four years, Sir William must have been possessed of extraordinary powers of organization and management. He was fortunate in securing the sympathy and support of the then Duke of Bedford and of his son, Lord John Russell, who had great influence at that period; he had also a zealous competent botanical cultivator as his lieutenant in Mr. John Smith.

Sir William was single in purpose, and straightforward in action, enthusiastic in manner, and at the same time prepared to advance by degrees, qualities which soon won for him the confidence of the Government. "Eminently fitted to shine in society, remarkably good-looking, and of the most pleasing address, frank, cordial, and withal of a very genial disposition, he never dissipated his time and energies in the rounds of fashionable life, but ever avoided the social prominence and worldly distinctions which some sedulously seek. None knew him but to love him, nor named him but to praise. He was one of the most admirable of men, a model christian gentleman." (*Asa Gray.*)

Briefly told, Sir William's career was as follows:—He was born in Norwich in 1785, and had means sufficient to enable him to early indulge his taste for natural history, first as an entomologist, afterwards as a botanist. He published various works on Musci and Hepaticæ, illustrating them with skilful drawings from his own pencil. In 1820 he obtained, through Sir Joseph Banks, the professorship of botany in the University of Glasgow. In 1827 he took over the editorship of the 'Botanical Magazine,' and drew many of the plates which afterwards appeared in that work. He began the 'Icones Plantarum' in 1829, and in 1830 he published his 'British Flora.' He was knighted in 1836 by William IV., and in 1841 he was appointed Director of Kew. He died in harness in August 1865 at the age of eighty, and was succeeded in the Directorship by his only surviving son, Sir Joseph Dalton Hooker.

The portrait of Sir William is a copy of a drawing made by Sir Daniel Macnee, the famous Scottish portrait painter, and represents him when about 50 years of age. We are indebted to Sir Joseph Hooker for its use here.

## ANNUAL REPORT.

(Read at the General Meeting held on February 28, 1895.)

---

THE Committee, in submitting their second Annual Report, beg to congratulate the Guild on its continued prosperity. Financially we are in a stronger position than we were last year. This is due partly to an increase in the number of subscribers, and partly to the liberality of two of our members. With regard to subscribers, we would call attention to the still large number of Kewites who have failed to send their subscriptions. This, we fear, is owing in a considerable number of cases to our failure to discover the members' whereabouts. But we regret to say that there are some who have received the Journal and neglected to send their subscriptions. The assistance given by many members in obtaining addresses and inducing outstanding Kewites to join the Guild is gratefully acknowledged. We would impress upon all the desirability of endeavouring, by every means in their power, to complete our directory, upon the accuracy and comprehensiveness of which the success of the Journal so largely depends.

Mr. J. W. Thomson has added still further to the generous support he has given the Guild since its formation, as recorded on page 15 of the Journal for 1894, by a bequest of a sufficient sum in New South Wales Stock to yield "in perpetuity and for all time, a sum of five guineas annually." The Stock will stand in the name of the Director of the Royal Gardens. We shall then have all the importance of an endowed institution, and be on a level with the great City Companies. Mr. Goldring, in subscribing a guinea, sets an example worthy of imitation by the more successful of our body. Our position would then be secure, and we should be justified in adding to the attractiveness of the Journal and extending the scope of the Guild generally.

The Committee are of opinion that Rule IV. should be amended so as to allow members who prefer it to commute their annual subscriptions by a single payment of twenty shillings. This arrangement, we believe, would be especially welcome to our Foreign and Colonial members, to whom the cost of sending their subscriptions by post is almost doubled. Money thus obtained could be securely invested in Consols, and in the unlikely event of the dissolution of the Guild any moneys in hand could be made over to the Gardeners' Royal Orphan Fund or other benevolent institutions.

There are still a few copies left of the Journal for 1894, and the Secretary will be glad to forward them on application to members who have not yet received them. We may mention as proof of the interest the Journal has excited that it has been officially applied for by the British Museum, and by botanical libraries in the United Kingdom, India, the Colonies, and the United States. The present First Commissioner of H.M. Works, &c., the Right Hon. H. J. Gladstone, has expressed his

appreciation of "the very interesting and instructive Journal" of our Guild.

There is a consensus of opinion, among past Kewites in particular, that purely professional papers such as are published in gardening periodicals should not be included in the Journal. Hitherto the prize essays read before the Mutual Improvement Society have been admitted as forming part of the original scheme and with a view to add interest to the proceedings of that Society. The Committee are reluctant to exclude good papers of this character, which would have a value with the younger members, but, in the event of there being sufficient matter of more personal interest to fill the Journal, they would have no alternative.

Members are invited to look upon the Journal as the medium of communication for all matters of peculiar interest to Kewites. The Secretary or Editor will be glad to receive notes of this description, so that the Journal may continue to be a newspaper in the literal sense of the term.

A Balance-sheet for the year 1894-95 is appended:—

<i>Balance-Sheet, 1894-95.</i>		<i>Dr.</i>	<i>Cr.</i>
	<i>£ s. d.</i>		<i>£ s. d.</i>
Balance from 1893 .....	1 17 3	Printing etc. of Journal ...	26 8 6
Subscriptions and Advertisements.....	26 16 6	Postage and Stationery.....	2 4 6
Donations:		Journals in hand .....	8 3 0
J. W. Thomson. <i>£</i> 5 5		Cash in hand .....	6 6 9
W. Goldring ...    1 1	6 6 0		
Journals in hand:			
113 of 1894 .....	<i>£</i> 5 13		
50 of 1893 .....	2 10		
	8 3 0		
	<u><u>£43 2 9</u></u>		<u><u>£43 2 9</u></u>

Audited and found correct,

W. N. WINN,  
C. WAKELY.

#### PROCEEDINGS.

*General Meeting, Feb. 28, 1895.*

The Meeting was again held in the Garden Library, by permission of the Director.

There were 61 members present.

The President, on moving the adoption of the Annual Report, said it gave him great pleasure to be officially associated with the Guild, which had already done a great deal towards knitting together into one brother-

hood the whole of the Gardeners who had been or were still at Kew. He had had an opportunity of gauging the feeling that the Guild had inspired among Kewites in distant countries, when visiting the United States in 1893 in the capacity of judge at the Chicago Exhibition. There he met many Kewites who were delighted with the project. He was certain that all who took an interest in Kew, its staff and its work, would find the Guild of great value. The Report was in every way satisfactory, and a proof that the Journal was much appreciated.

Mr. Charles H. Curtis (1892) seconded. He congratulated the Committee on their success in finishing their second year with a good balance in hand. He approved of the suggestion in the Report with regard to donations from Kewites in a position to afford them, and considered that money devoted to such a purpose would be doing good work. He suggested that illustrations showing new and striking features in the Gardens at Kew, if published from time to time in the Journal, would be much appreciated by Old Kewites.

Mr. John Gregory (1866) said the Journal had been the means of re-introducing him to many of his co-Kewites whose whereabouts were previously unknown to him; and it had also resuscitated his regard for and interest in Kew, for, as he perused it he had lived over again the pleasant and profitable time he spent at Kew nearly thirty years ago, when, although the place was different from what it is now, the men employed there were professionally as keen as the best are to-day. A large proportion of the gardeners he knew at Kew were not in the list; he wondered if they were dead.

Mr. William Dallimore approved of the proposal to allow members to commute their subscriptions. He thought a greater number of copies of the Journal might be printed, so that duplicate copies could be sold at a cheaper rate to members who cared to obtain them for friends etc.

Mr. William H. Ferguson (1862) was disappointed to find so few Old Kewites present, as the Guild had a greater value for them than for those who were still at Kew. No doubt the Annual Meeting would in time become a welcome rendezvous for all Kewites, but he thought a larger and more convenient room than the present one was necessary, and he hoped the Committee would be able to find one for the next Meeting. He fully approved of the plan of the Journal, and thought it wise to avoid all contentious questions. News, not horticultural polemics, was what they expected to find in its pages. He hoped it would in time be found possible to publish the Journal quarterly.

Mr. John Weathers (1888) proposed that the thanks of the Meeting be conveyed to Mr. John W. Thomson for his generous donation and promise of endowment. He attributed the present comparatively low status of gardening as a profession to want of cohesion among its followers. The Guild afforded an opportunity to Kewites to strengthen their position by mutual assistance and sympathy. Horticulture had been an important industry in Great Britain for many years, and its importance was increasing by leaps and bounds. Whether its professors remained as a



class on a level with gamekeepers and footmen, or rose to that high position among commercial bodies which it appeared to him to be their due, depended entirely upon themselves. The rights of the horticulturist had yet to be proclaimed. He had heard it said that gardeners had no backbone, and the "rooks" knew it. It certainly was difficult to get at the bed-rock of the horticultural movement. Kew men, at any rate, were showing the way to a Gardeners' Union.

Mr. W. H. Pettigrew (1890) had come from Cardiff specially to attend the meeting. Kew grew dearer to him every year, and he felt as grateful to her as a child to its mother. An accident had decided that he should come to Kew; and the best he could wish for all young men who had aspirations beyond those of the jobbing gardener, was that either through accident or design they could enjoy the advantages of the Kew training. He thought the commutation of the subscription would probably be productive of lethargy or even indifference to the annual publication of the Journal, which, it must be remembered, was the outward and visible sign of that union, which they were all pleased to recognize and support.

Mr. R. H. Pearson (1890) thought the work accomplished so far by the Committee was as much as could be reasonably expected. He, for his part, was surprised that so much could be given in return for the small amount subscribed, but until the Committee asked for more he thought the Guild might feel contented. The only suggestion he would venture to make was, that a larger room than the Garden Library should be secured next year for the General Meeting, the crowded and heated state of the present meeting, although satisfactory in one sense, being unsatisfactory from the point of view of comfort.

Mr. Watson read a number of letters from members in all parts of the world which revealed the keenest interest in and enthusiastic support for the Guild. He appealed to young Kewites for their sympathy and support, and to Kewites of all ages for matter for the Journal. The Committee, he said, desired to make the Journal thoroughly representative of all Kew men, not merely of a section; but as news, facts and history—not fiction—formed the contents bill, it could only be with the co-operation of all concerned that the Journal could be made the *Times* of Kew and Kewites. He was glad to be in a position to promise a good Journal for 1895, but they must "keep the pot a-boilin'." Their baby was still a young baby, with a tooth or two perhaps, but as yet unable to walk—a critical time for both journals and babies.

The following addition to Rule IV. was proposed by Mr. W. J. Bean and unanimously adopted:—"Members may commute their annual subscriptions by a single payment of twenty shillings."

It was also decided that the Annual General Meeting shall be held on the evening of the last Thursday in February of each year.

The whole of the Officers for the past year were re-elected except Mr. Bliss, who had retired because of his promotion. Mr. R. J. Morris was elected in his place.

**President.**

G. Nicholson, A.L.S., Curator.

**Secretary.**

J. Aikman, Whitestile Road, Brentford.

**Treasurer.**

W. J. Bean, Royal Gardens, Kew.

**Committee.**

J. M. Browne, Kew.

R. J. Morris, Kew.

W. Watson, Kew.

F. W. Burbidge, M.A., F.L.S., Trinity College Gardens, Dublin.

D. Dewar, Curator, Botanic Gardens, Glasgow.

W. Goldring, Landscape Gardener, Gloucester Road, Kew.

G. Harris, The Gardens, Alnwick Castle, Northumberland.

W. W. Pettigrew, Superintendent of Parks, Cardiff.

J. Weathers, Asst. Secretary, Roy. Hort. Soc., London.

H. J. Goëmans, Holland.

---

**NOTES, CORRESPONDENCE, ETC.**

VISITORS DURING THE YEAR 1894.—The number of persons who visited the Royal Gardens during the year 1894 was 1,377,588. This shows a falling-off, as compared with 1893, of (in round numbers) 450,000, which is probably to be attributed to the marked difference in the summer of the two years. The total does not, however, differ appreciably from that of 1891, and does not depart widely from 1,416,887, the average for the preceding ten-year period.

The actual annual attendance of visitors at Kew now oscillates about a figure which probably nearly approaches a million and a half; and at this it is perhaps likely to remain for some time with the existing means of access from London.

**HAND-LIST OF TREES AND SHRUBS** grown in Arboretum. (Part I.—*Polypetalæ*.)—"This is the first of a series of Hand-lists of the collections of living plants cultivated in the Royal Gardens which it is intended to issue from time to time. It is hoped that they will be found useful in indicating to visitors interested in particular groups of plants the species which Kew already possesses. In the hands of correspondents they will serve to show in what directions the collections may be added to. It is further hoped that they may be found of some value in establishing an approximate standard of nomenclature, which is often much confused in gardens and too frequently erroneous." A list of all the Ferns cultivated

**President.**

G. Nicholson, A.L.S., Curator.

**Secretary.**

J. Aikman, Whitestile Road, Brentford.

**Treasurer.**

W. J. Bean, Royal Gardens, Kew.

**Committee.**

J. M. Browne, Kew.

R. J. Morris, Kew.

W. Watson, Kew.

F. W. Burbidge, M.A., F.L.S., Trinity College Gardens, Dublin.

D. Dewar, Curator, Botanic Gardens, Glasgow.

W. Goldring, Landscape Gardener, Gloucester Road, Kew.

G. Harris, The Gardens, Alnwick Castle, Northumberland.

W. W. Pettigrew, Superintendent of Parks, Cardiff.

J. Weathers, Asst. Secretary, Roy. Hort. Soc., London.

H. J. Goëmans, Holland.

---

**NOTES, CORRESPONDENCE, ETC.**

VISITORS DURING THE YEAR 1894.—The number of persons who visited the Royal Gardens during the year 1894 was 1,377,588. This shows a falling-off, as compared with 1893, of (in round numbers) 450,000, which is probably to be attributed to the marked difference in the summer of the two years. The total does not, however, differ appreciably from that of 1891, and does not depart widely from 1,416,887, the average for the preceding ten-year period.

The actual annual attendance of visitors at Kew now oscillates about a figure which probably nearly approaches a million and a half; and at this it is perhaps likely to remain for some time with the existing means of access from London.

**HAND-LIST OF TREES AND SHRUBS** grown in Arboretum. (Part I.—*Polypetalæ*.)—"This is the first of a series of Hand-lists of the collections of living plants cultivated in the Royal Gardens which it is intended to issue from time to time. It is hoped that they will be found useful in indicating to visitors interested in particular groups of plants the species which Kew already possesses. In the hands of correspondents they will serve to show in what directions the collections may be added to. It is further hoped that they may be found of some value in establishing an approximate standard of nomenclature, which is often much confused in gardens and too frequently erroneous." A list of all the Ferns cultivated

at Kew has also been issued. It contains the names and synonyms of 1116 species and well-marked varieties of Ferns, 600 of British Ferns, and 97 of Fern-allies. The Hardy-Herbaceous and Alpine plants, which number about 5000, have also been catalogued for publication, and a list of the Orchids is also in preparation. Guides to each of the three Museums and the North Gallery may also be had. It is unnecessary to recommend these lists to Kewites. Every gardener should possess them as a means to orthodoxy in plant-names. They are cheap, sixpence or less each, and they are to be obtained at the Gardens—postage three halfpence.

---

**THE PALM HOUSE.**—The heating-apparatus in this house has had to be strengthened by the addition of two new boilers and ten extra rows of 4-inch pipes. The northern half was completed last year, and the result has been a considerable saving in fuel compared with the consumption under the old arrangement. The cost of the whole will be about £2000. The total length of hot-water pipes in this house is now about five miles.

---

**THE TEMPERATE HOUSE.**—On the eve of going to press we learn that it has been definitely decided to complete the Temperate House, and that the builders will begin in July this year. Both wings are to be built simultaneously, the estimated cost being £12,000.

---

**THE CONSERVATORY (No. 4).**—This house has been wholly renovated and enlarged, and it is now one of the handsomest plant-houses at Kew, both externally and internally. The use of iron for the girders and of larger panes of glass has made a great difference in the elegance of the structure and also in the amount of light admitted to the plants.

---

**GREEN GLASS.**—At last it has been determined to abandon the use of green glass for plant-houses at Kew. Practical cultivators have never been able to see through the arguments used in its favour, and the plants themselves have been equally dense and refused to grow properly under it. There has been a great improvement in the health of the plants since white glass has been substituted. Science does sometimes make a "muss" in a garden.

---

**THE PALACE LAWN.**—This is now a portion of the Gardens, the wire fence having been removed and a path made across the lawn from the end of Museum No. 3 to the corner near the Brentford entrance. This alteration adds considerably to the landscape effect as well as to the convenience of visitors. A still greater improvement has been made by the removal of the whole of the wire fence which separated the Botanic Garden from the Arboretum.

---

**THE WILD GARDEN.**—The beauty and interest of the Wild Garden surrounding the temple of Æolus, near the Cumberland Gate, becomes

more marked each year, and its success has suggested that the same idea might be carried out in other parts of Kew. The mound in the Arboretum upon which the flagstaff stands has accordingly been enclosed by a light strung-wire fence. There are a few trees scattered over this piece of ground, but it is more open and sunny than the older enclosure, and there is abundant room for free-growing shrubs like the wild Roses, Forsythias, Rubus, and numerous others that suggest themselves. With these planted in informal groups and such things as Foxgloves, *Impatiens glandulifera*, Daffodils, Bluebells, and the many other bulbous and herbaceous plants that are suitable for this work, it is believed that this piece of ground will in a few years become as charming a feature as is the Wild Garden near the Cumberland Gate.

---

TREE AND SHRUB COLLECTIONS.—The work of systematically replanting and rearranging the collections in the Arboretum, which has been in progress for some years, was continued during the autumn and winter months. This task has become necessary both by reason of the great increase in the number of species and varieties and by the wretchedly impoverished state of the soil in the Arboretum. The *Spiræas*, for instance, were, until last winter, growing in a layer of poor sandy soil six to nine inches deep on a hard shingly bottom. Besides the *Spiræas*, the collections of *Ribes*, *Hydrangea*, *Philadelphus*, *Deutzia*, and various other smaller genera belonging to the *Rosaceæ* and *Saxifrageæ*, have been furnished with a good supply of loam. Following out the policy of making the collections not only botanically complete but also as attractive as possible, large masses or beds have been made of species and varieties that are sufficiently ornamental.

---

THE QUEEN'S COTTAGE GROUND, although it still remains closed to the public, has been a good deal opened up, and its sylvan beauties made more visible from the further end of the Arboretum. Several new avenues have been cut through the wooded part, some opening on to the Old Deer Park, others on to the river. It is at present a beautiful wilderness, some portions being covered with a thick tangled undergrowth of bramble, or carpeted with myriads of bluebells; whilst other parts open into charming glades. In May, when the bluebells are in their full glory, there is no sight so lovely within the same distance of London. These are followed by the flowering of immense masses of the Pontic *Rhododendron*.

---

THE OUTWARD SPREAD of London, and the invasion by brick and mortar of places which not so very long ago were country meadows and corn-fields, go on as rapidly in the neighbourhood of Kew and Richmond as elsewhere. A great difference in the populousness of this neighbourhood would be noticed by old Kewites who left no later even than in the early "eighties." The Garden is now, in fact, surrounded by a belt of houses, although it is fortunate that the Old Deer Park, the Sion House property,



and the river keep the builder at bay on their sides. Long may they do so! Brentford, like the poor, is always with us, and the odours that are wafted across the Thames have all their old richness and variety. It is not only the ever increasing smoke and fog that make refined horticulture more and more difficult: the expense and trouble of obtaining good loam, now that all the old supplying grounds are getting built over, becomes each year greater. To an old *habitué* of the Mutual Improvement Society there is scarcely any picture more familiar than that of a young and enthusiastic member of the Society speaking in terms of mingled reproach and scorn of the quality of the loam supplied to him by the authorities, and with which, forsooth, he is expected to grow plants. His scathing remarks are always listened to with sympathy and appreciation by his fellow-sufferers. Many of them come from those delectable places where the struggles and difficulties peculiar to urban gardening are unknown, and where the advice of the gardening books that "the turf of an old pastureland should be cut two or three inches deep and stacked grass downwards for a year" etc., etc., can be religiously followed. Alas! for the town gardener. One wonders whether he could support the joy of existence should it suddenly become possible for him to have pure air, good water, and loam of the gardening-book standard for his plants.

---

**INCREASE IN GARDEN STAFF.**—Past Kewites will be interested to learn that trained gardeners are now considered necessary for other departments than the indoor. Ten years ago the Temperate House was worked by labourers as also were the Flower Garden, Herbaceous and Arboretum departments. Now, however, gardeners are employed for them; consequently there are forty-four gardeners on the books, or fifteen more than formerly.

---

**GARDENERS' WAGES AT KEW.**—As a result of the action of the Metropolitan Radical Federation, who brought before the notice of the First Commissioner of Works, Mr. Herbert Gladstone, the low rate of wages paid to labourers employed in the Royal Parks and Gardens, and urged him to place them on a level with the labourers employed in the Parks and Gardens under the control of the London County Council, the labourers at Kew had their wages raised on April 1st last to 21s. per week.

At first it was not intended that the gardeners employed at Kew should participate in this improvement. They therefore memorialized the First Commissioner, who afterwards received a deputation of them to discuss the matter. The Director also supported them in their appeal to be treated at least as well as the unskilled labourer. The result was a rise of wages from 18s. to 21s. A comparison between the wages of 1880 and those of the present time shows what has been done to improve the condition of the gardener and labourer at Kew within the last fifteen years:—

	1880.	1895.
Gardeners .....	16 <i>s.</i> per week.	21 <i>s.</i> per week.
Subforemen.....	22 <i>s.</i> „	24 <i>s.</i> „
Labourers .....	17 <i>s.</i> „	21 <i>s.</i> „
Gangers .....	20 <i>s.</i> „	24 <i>s.</i> „

The scale of pay for half-day Sunday duty is now a minimum of 2*s.* 6*d.*, with 6*d.* per hour beyond five hours.

**HALF-HOLIDAY ON SATURDAYS.**—The working hours for gardeners at Kew are necessarily long, owing to the nature of the duties they have to perform. A concession has, however, been made this year, and, provided the weather and the condition of the work permit it, every gardener is now allowed leave on one Saturday afternoon in four. It is scarcely necessary to say that this is a most valuable concession to men, many of whom come from the country to the Metropolis and desire to see some of the sights of the town, visit the Museums, etc., during their stay at Kew.

**SKATING.**—Kew is managed on more democratic lines than formerly. It is not now considered a sin to smoke in its precincts nor is it criminal for a visitor to eat an orange or a bun whilst sitting under the shade of the trees. The same spirit no doubt prompted the authorities to allow the staff to skate in the evenings on the fine piece of water in front of the Palm-house during the severe frost. On several occasions the pleasure was considerably enhanced by the use of Chinese and other lanterns. There was also some exhibition skating on the part of several experts in the art.

**OUR POET.**—Mr. Percy T. Ingram (1882), late of Belvoir, now teacher of Botany at Grantham, has shown considerable poetical ability, and has published a volume of his poems. He sends us the following sonnet :—

Kew.

Fair Capital of Flowers, where, year by year,  
 The wizard Science gathers to his hand  
 The living garniture of land on land :  
 The world's epitome thou dost appear.  
 Great art thou in thy garnered splendour here,  
 And great thy name beyond the circling seas ;  
 Yet do we love thee, not because of these,  
 But through the changing years we hold thee dear  
 As "Alma Mater" of the Gardener's art—  
 Thus haply should thy sons as strangers meet  
 From England, home, and kindred far apart ;  
 "I was at Kew" bids them as friends to greet,  
 As boon companions they the past renew,  
 And live the old days over. *Floreat Kew!*

MR. W. LUNT.—A list of the plants collected by Mr. Lunt in the Hadramaut was published in the September number of the *Kew Bulletin*. It includes two new genera and twenty-five new species—a most satisfactory result, considering the poverty of the flora. Mr. Lunt has since been appointed Assistant-Superintendent of the Botanic Gardens, Trinidad.

MR. S. A. SKAN, a member of the gardening staff, has been appointed, on the results of a competitive examination before the Civil Service Commission, an Assistant in the Royal Gardens, to date from August 16, 1894. Mr. Skan's competitors included Mr. Lunt, who was second, and an Oxford B.A., who was third. This ought to silence those "croakers" who declare that the British gardener lacks intelligence.

MR. W. E. BROADWAY, formerly a member of the gardening staff of the Royal Gardens, Assistant-Superintendent of the Botanic Gardens, Trinidad, has been appointed Curator of the Botanic Garden at Grenada.

MR. A. LINNEY, a member of the gardening staff of the Royal Gardens, has been appointed gardener at Government House, in the Falkland Islands.

MR. HUGH MACMILLAN, a member of the gardening staff, has been appointed Head Gardener in the Botanic Gardens, Ceylon, Mr. Peter Clark, who held that post for fourteen years, having accepted an appointment as manager of a tea-plantation in that colony.

MR. HERBERT GLADSTONE, H.M. First Commissioner of Works, writes :—  
"It was very good of you to send me the very interesting and instructive Journals of the Guild. Kew must be to the young gardeners what Eton is to her lads, an ideal place, the associations of which never lose their charm. The literature is a great testimony to the practical value and the inner spirit of Kew."

MR. G. HARRIS (1874) writes as follows :—"One of the objects of the Guild is to prevent the names of those who have been honoured with employment at Kew from passing into oblivion. I cannot find the following old colleagues of mine (1872-74) in the list of Past Kewites :—

"Paul Lorenz, who came from the Royal Gardens of Saxony. He was a splendid draughtsman, and when visiting a horticultural establishment of note, his custom was to sketch any plant which arrested his attention, shading and completing the sketches critically afterwards. In him I met a man who impressed me deeply with the value of a good education, and how important a factor it is in enabling a man to battle with the ups and downs of life. He left Kew to take charge of the Zwickau Town Gardens, probably in 1873. James Dunstan, who was with me in the Palm House, and succeeded me as sub-foreman, and was afterwards offered a foreman's place, but elected to go to Cape Town to take charge of the Public Gardens

there. On an unfortunate Sunday morning, he and a friend went to bathe in the sea, and Dunstan was drowned. He was a sterling young fellow. Arthur Freeman, a fine young man over six feet in height, went out with a gentleman on an exploring expedition somewhere in Africa, where he contracted some disease and died on his way home.

“I am intensely in sympathy with the objects of the Guild. May it grow in usefulness with time, and especially in drawing men together.”

---

MR. L. CASTLE (1877).—Until about three years ago Mr. Castle was a member of the editorial staff of the ‘Journal of Horticulture.’ He is now manager of the Duke of Bedford’s Experimental Fruit Farm at Ridgmont, which was established a year ago with the object of extending our knowledge of Fruit-culture by means of careful experiments on the most important hardy fruits. Mr. Castle’s labours in changing what was, twelve months ago, practically a piece of waste land, choked with weeds, into a clean and well-appointed fruit-farm, have given great satisfaction to the Duke, and were spoken highly of by a number of experts who were invited a few days ago to inspect the Farm.

---

MR. J. E. LANGE (1886) writes:—“Some little time ago I had the pleasure to receive from Copenhagen the ‘Journal of the Kew Guild,’ the offspring of that dear old Mutual Improvement Society. I need not tell you that I wish it God-speed. I spent a couple of years full of interest and pleasure at Kew, and my thoughts often turn back to it.

“I had been wondering how fate had dealt with my old comrades, and now here comes the Journal with just the information I wanted! Mr. Dewar wielding his sceptre in Scotland; Broadway lounging beneath the palms in the West Indies; Cameron and Canning going ahead in the Far West; Baker residing in venerable Oxford; McHardy dwelling at the Antipodes—at Mooroopna (what an uncivilized name!); Proudlock eating rice in India, etc., etc.

“Little is to be said about myself. Since my return from France and Italy in 1887, I have been teacher of Botany and many other things besides at the Agricultural School here. I also look after the College Garden, and have built for myself a little red cottage on the outskirts of an oak wood, surrounded by a small garden, which is filled with hardy perennials, and looks like a mixture of rockery and wild garden.

“*Floreat Kew!*”

---

KEW IN THE AZORES.—Where is the Mr. Brown alluded to in the following extract from Prof. Moseley’s delightful book ‘Notes by a Naturalist on H.M.S. *Challenger*’ p. 29:—“We passed many fine flower gardens, planted with a large variety of Australian, New Zealand, and South American plants, and went by numerous hills, small volcanic cones, planted with firs and various timber trees with great care. The appearance of the Island has been wonderfully modified by careful

plantation, most of the work having been done by a Mr. Brown, a gardener from Kew, who was brought to the Island 30 years ago by Don José de Canto, to superintend the laying-out of his garden."

---

MR. A. SHAW (1888) writes from Melbourne :—" I have held my present position two years, and consider myself fortunate compared with most gardeners who come to Australia to try their luck. Gardening here is on the same level as ordinary labour, especially in private gardens, where the duties of the gardener include the care of pigs, fowls, cows, and perhaps a horse or two. I would not advise a competent man to come out here unless to a really good situation. Hanly, Elsom, and Bevan have called on me since I have been here. I was gardener to the late Governor, the Earl of Hopetoun, who was a kind and generous master and by whose recommendation I obtained my present post. I enclose P.O. for 5s. My friends may like to know that I am married and have a son three years old."

---

MR. W. McHARDY is still in Australia, where he has been since the early part of 1891. He writes :—" Very many thanks for the two Journals received, they were most acceptable and interesting. More power say I to all your elbows. My experiences, I am afraid, are not particularly interesting since leaving India. I sailed from Calcutta in March 1891. On my arrival at Adelaide I went to the Botanic Garden to present a letter of introduction to Dr. Schomburgk, but found that he had died the week before. Disappointment No. 1! The Curator (Mr. McDonald), as well as several nurserymen, advised me to try Melbourne, things being awfully dull in South Australia at that time. At Melbourne I was just as unsuccessful, but finally got a situation with one of the largest squatters in Victoria. Any garden labourer, however, would have been quite capable of doing the work, there were only a small greenhouse and conservatory, all the rest outdoor work. My next move was to New South Wales, also with a squatter. This was a degree worse—a few chrysanthemums and roses about the front of the house, all the rest vegetables and fruit. When I tell you the fruit was sold to Chinamen to retail, you can imagine there was but little horticulture there of a kind to satisfy my æsthetic yearnings or those of any one else. Anything of this kind is foreign to Australian squatters, and most of them prefer a cabbage to an orchid any day. Their tastes and education require cultivation. Australia is, in fact, no place for gardeners (as such) to come out to. There are a few parks and public gardens about the towns, but squatters, business men, etc. are too busy making money to think about gardening as we understand it. The pay of gardeners out here is only on a par with (or very little above) that of ordinary labourers, hence they have the honour of being preferred to common labourers as they can do the work of both. In 100 years these Colonies may be more suitable for gardeners; till then stay at home; you can exist there, and it is home, anyhow, whilst in this belated country it is only bare existence, and a very long way from home. I remember in the old Mutual Improvement



Society days when I was at Kew (heigho!) we used to make merry over the advertisements put in the 'Chronicle,' etc. for gardeners. Look at the few cut from a newspaper which I enclose. I do not notice that paragon of virtue 'married, without encumbrance,' so much in demand by English parsons, offering himself, but you will see for yourself the type in demand out here. . . . I have never heard anything of Green, Hanly, or Ferguson, all of whom were Kew men in my time, and came out to Australia to try their luck. I enquired at several of the seed-shops in Melbourne."

The following are some of the advertisements referred to by Mr. McHardy:—

**G**ARDENER, experienced, groom, drive, milk; good testimonials. H. M., Argus office.

**G**ARDENER, well up in all branches, good milker, understand horse, buggy; reference. 355, Argus office.

**G**ARDENER, experienced, single, middle-aged, English, milk, useful; first-class Melbourne references. Robert, Argus office.

**G**ARDENER, prune, milk, groom, undeniable references, waiting, 15s. Labour Exchange, 347 Post-office-place. No charge to employers.

Mr. McHardy is now managing a farm, but thinks of trying America, or perhaps tea-planting in India, in the near future.

Mr. V. BOUCKENOGHE (1892), Superintendent of Plantations, New Antwerp, Upper Congo, writes as follows:—"I left Belgium two years ago and arrived here at New Antwerp on May 20th, 1893. *En route* I had a month's march from Matadi to Stanley Falls. What a fine country Tropical Africa is. But above all the manifold phases of Nature which you see, that of the struggle for existence is the most prominent and impressive. What strange things one sees, too, among plant life. I regret now that I did not obtain a better grasp of systematic Botany whilst at Kew. It is when placed in such circumstances as I am that one feels keenly the want of knowledge which one had the chance of acquiring but neglected to do so. New Antwerp is the finest town in the whole Congo Free State. One of my duties has been the laying-out of bold walks and boulevards—for you will remember how essential such things are to my countrymen and our neighbours the French, no matter where we may be. One of these boulevards is thirty yards broad and a mile and a half long. It has four rows of Palms and Bread-fruit trees, so that in a few years it ought to be a grand sight. I found it imperative to lose no time in laying-out a nursery garden wherein to sow seeds, etc., for which purpose I had to clear the land, and often had from 200 to 250 hands employed. One of the principal objects for which I came out here was to experiment with Coffee and Cocoa in order to see whether plantations of them would succeed. After two years' hard work I am glad to say that they will. Already I have planted about 35,000 of them, and I have 20,000 more waiting for the next planting season. Last December

I put out 15,000 young plants of the 'Chinese banana' (*Musa Cavendishii*), which does not reach more than seven feet in height, and usually fruits in eight or ten months, the clusters being very large and often weighing over one hundred pounds. It is singular that the natives continue to prefer the 'Plantain.' *Manihot* is the base of every meal that the Bangala natives partake of. Acres and acres are planted with it, for the people have rather a penchant for cultivation—the women especially being good at field labour. The dry season lasts only from about Christmas to the middle of February. Of kitchen-garden crops I find the majority of things that every good gardener at home likes to have do well here. I enjoy good health, and on the whole I like this place so much that I regret I did not come out here long ago."

MR. H. MILLEN (1890), Curator, Botanical Station, Lagos, communicates the following:—"The town of Lagos is situated on a small island, and is one of the largest and most flourishing towns on the West Coast; on this account it is called the Liverpool of West Africa. There are about 200 Europeans in the Colony, chiefly engaged in the service of the Government or of merchants. The Botanical Station is situated on the mainland, and is some distance from the town and island of Lagos, and I am the only European residing there. My work, however, is congenial, and I have plenty to occupy the whole of my time and thoughts. We commence at 6 A.M., and keep on till 11, when we breakfast, starting work again at 1 o'clock, and continuing till 5. The evenings are long, for it becomes dark soon after 6.30 P.M., when I dine, after which I enjoy a quiet read or do some writing, but after a day's work here one feels fatigued and retires early. Oftentimes my duties take me to the town of Lagos, and generally I go there every week's end and enjoy the company of white men. The Europeans are very sociable and always welcome a 'white.' I am invited to all parties, private and official, so that on the whole I get plenty of change here, and I am as happy as a king—so long as the fever keeps off. The native workman is shockingly lazy and ignorant. He has to be shown everything, and generally treated like a baby. Employed at the Station are Dahomians, Kroos, and Yoruba men. The Kroo Boys are the best workmen, and are therefore in favour on all parts of the Coast.

There is no doubt that horticultural and agricultural work is most trying and dangerous to Europeans engaged on the Coast, as they are compelled to be out in the sun and about the grounds. The frequent and lengthy vacations which are necessary for all Europeans on account of the unhealthy nature of the climate are a drawback to the development of the Colony; still, considerable progress has been made already in the direction of planting and improved methods of cultivation, and we hope to do a great deal more before we retire into that nice little place in the country of which all Colonists dream."

MR. WALTER DRAPER (1892).—The following interesting Syllabus may be taken as evidence that technical education has reached the banks of the Nile:—

“Course of Horticultural Lectures on Practical Gardening in Egypt. To be delivered in February and March 1895, by Mr. WALTER DRAPER, F.R.H.S., Kew, at the Parish Room, Ramleh.

SYLLABUS :—

1. Botanical classification of plants. Climate and Soil. Trees and Palms.
2. Arrangement of a Garden. The planting of shrubberies and borders. Lawns and flower-beds.
3. Climbing plants. Plants for windy and sheltered positions. Roses. Annuals.
4. Hedges. Conservatories. Specimen plants. Water-gardening and aquatics.
5. Potting. Bulbs. Chrysanthemums. Cacti and Succulents. Economic plants.
6. Vines. Fruit-trees. Pruning. Grafting. Propagating.”

MR. A. G. TILLSON (1889), Curator of the Botanic Station, Antigua, writes :—“Probably you wonder why I have not written before, and may have thought I had lacked that attachment for Kew which is revealed in the actions and writings of many of my old colleagues. My Kew days were the happiest and most profitable I have known, and my admiration and respect for the establishment are unbounded. Botanic Garden work in Antigua is hard, and the people here are not easily convinced that the one aim of the Station is to help them to improved conditions. There is a projected Agricultural College, whether or not it will come off I cannot tell. I have been asked to take part of the tuition. I hope the scheme will float and I believe I could do the portion of work allotted to me. I am very happy here; I have a very comfortable home, a real good English wife, and a dear little bairn.

“Jones came up to spend Christmas with me, and we had a very pleasant time together. We are both looking forward to the time when, Fortune favouring us, we shall be able to revisit Kew. He seems to feel the loss of Mr. Barber very much, although Mr. Barber was unable to spend much time in Dominica. I spent the best part of at least two mornings a week in Mr. Barber's office, and have in consequence gained much experience in the office work of the Department; the practical part of my work Mr. Barber made a point of leaving to me as much as possible.

“One thing at Kew I greatly admired was the unwritten law to put every man on his mettle. Doubtless this is the attitude of the Director towards Curators, and I would like it applied in my case. I cannot help thinking that practical men who study to keep up with the times and are keenly interested in the work in hand, although they may not have enjoyed a University education, may sometimes succeed. My feeling is that Kew men engaged in Botanic Station work put themselves out of touch with other matters, and should be made to feel that their position is a safe one. They should be able to live comfortably and at the same time save a portion of their income and take an occasional trip home to England to brace them up. Business men and planters during good times make large profits; not so Curators, their pay remains the same if they resist

the temptation to become planters, which is another reason, I take it, why the salary should be a comfortable one. I would not advocate making nabobs of Curators, but simply that they should be enabled to live comfortably, provide for and educate a family, and put by a little for a rainy day.

“My work in Antigua is most congenial and I like it immensely. The climate is both pleasant and healthy, a nice breeze is always blowing, our days are bright and sunny, and our moonlight nights glorious. We have nice society, many English, Scotch, and Irish families. The sea, with its many opportunities for recreation, is within about six miles, while cricket, tennis, cycling, etc. may also be enjoyed. Life in the Tropics is not necessarily unhealthy or unhappy, and can be made quite the reverse.”

MR. A. B. WESTLAND (1883).—His friends will be pleased, no doubt, to read the following extract from a letter of Dr. Franceschi, Director, Southern California Acclimatisation Society, Santa Barbara:—“We have been lucky to secure the services of Mr. A. B. Westland, formerly of Hong Kong and Agra, and trust that his help will be most valuable to us.”

HENRY B. SURMAN.—‘American Gardening’ lately published a portrait and lengthy notice of Mr. Surman under the heading of “Representative Gardeners,” from which we extract the following:—“He served four years at Kew, and lived in rooms with Mr. Burbidge, now Curator of Trinity College Gardens, Dublin. He came to America in 1871 to a situation in Ohio. He afterwards found employment in various parts of the States until nine years ago, when he took charge of the handsome gardens of Mr. E. W. Clarke, where he still reigns. The appearance of the place speaks well for his ability as an all-round gardener, for no matter what department is examined it will be found complete and well kept. Chrysanthemums have been his hobby, and he has new started on Cannas, having already some good seedlings of excellent promise. His Chrysanthemums have not been confined to this country, as some of the leading varieties in England are of his raising.”

MR. M. BARKER (1884).—We extract the following from the ‘Cambridge Press’ (Mass., U.S.A.), with which there was a portrait of our Irish friend:—“AN HONORED CITIZEN. Mr. Michael Barker, an able young man of much prominence in the city of Cambridge, left here last Monday evening to assume the duties of superintendent of the horticultural department of Cornell University, Ithaca, N.Y. Mr. Barker belongs to a famous gardening family in Belfast, Ireland. He came to this country about six years ago, and was employed as assistant superintendent in the Harvard Botanical Gardens. During his stay of six years in Cambridge he has endeared himself to many prominent citizens of the university city. His connection with many social and benevolent organizations, more especially with Division 21, A. O. H., has been such as to warrant a banquet in his honor by the Board of Directors and other prominent members of that Society, of which he was himself an officer and

very active worker. The party having done ample justice to the banquet table, they saw their much-lamented associate off on the 7.15 P.M. train for his new home in Ithaca."

Mr. Barker also writes us :—" I like the Journal immensely. You cannot imagine how welcome it is to each and every one of us 'foreigners.' We devour every item, and the time seems too long between the feasts. You will be pleased to learn that I have just been appointed one of the State Vice-Presidents of the Society of American Florists, the most important horticultural and floricultural society in this country. The territory under my jurisdiction is the western part of New York State, including such cities as Rochester, Syracuse, Albany, and Buffalo." Mr. Barker has lately issued a Chrysanthemum Annual for the U.S.A., which has been favourably noticed by the English press.

---

#### REVISED CONDITIONS OF APPOINTMENT OF GARDENERS FOR SERVICE IN INDIA, 1894.

1. All candidates will be required to pass an examination before the India Office Medical Board, with the view of their fitness for service in India being ascertained.

2. The original engagement will be for three years.

3. For every selected candidate a free second-class passage by Canal steamer will be provided.

4. A sum of £20 will be allowed for the purchase of an outfit.

5. The original three years' engagement shall be terminable at the end of the third year of service by six months' notice on either side, and a free second-class passage to England will be provided ; but in the case of dismissal for misconduct no free return passage will be provided.

6. If the three years' engagement is not terminated by such notice on either side, the gardener will continue to serve upon the like terms and conditions (except as to free return passage), his continued service being terminable by six months' notice on either side.

7. A gardener retained in the service of the Government after the expiration of the original engagement will be eligible for leave and pension under the rules in force from time to time for Indian services, the qualifying service for leave and pension reckoning from the date of his joining his first appointment.

8. Every selected candidate will, on arrival in India, be posted to the Royal Botanic Gardens, Calcutta (or to such other public garden as may be directed), as a supernumerary. His pay, while he remains a supernumerary, will be at the rate of Rs. 150 per month. When the Government appoints him to a particular post he will cease to be a supernumerary, and his pay will be increased to Rs. 200 a month. Up to the end of five years' service this pay will rise by annual increments of Rs. 5 per month. After the conclusion of five years' service the pay then reached will rise by annual increments of Rs. 10 until a maximum of Rs. 425 per month has been reached.



very active worker. The party having done ample justice to the banquet table, they saw their much-lamented associate off on the 7.15 P.M. train for his new home in Ithaca."

Mr. Barker also writes us :—" I like the Journal immensely. You cannot imagine how welcome it is to each and every one of us 'foreigners.' We devour every item, and the time seems too long between the feasts. You will be pleased to learn that I have just been appointed one of the State Vice-Presidents of the Society of American Florists, the most important horticultural and floricultural society in this country. The territory under my jurisdiction is the western part of New York State, including such cities as Rochester, Syracuse, Albany, and Buffalo." Mr. Barker has lately issued a Chrysanthemum Annual for the U.S.A., which has been favourably noticed by the English press.

---

#### REVISED CONDITIONS OF APPOINTMENT OF GARDENERS FOR SERVICE IN INDIA, 1894.

1. All candidates will be required to pass an examination before the India Office Medical Board, with the view of their fitness for service in India being ascertained.

2. The original engagement will be for three years.

3. For every selected candidate a free second-class passage by Canal steamer will be provided.

4. A sum of £20 will be allowed for the purchase of an outfit.

5. The original three years' engagement shall be terminable at the end of the third year of service by six months' notice on either side, and a free second-class passage to England will be provided ; but in the case of dismissal for misconduct no free return passage will be provided.

6. If the three years' engagement is not terminated by such notice on either side, the gardener will continue to serve upon the like terms and conditions (except as to free return passage), his continued service being terminable by six months' notice on either side.

7. A gardener retained in the service of the Government after the expiration of the original engagement will be eligible for leave and pension under the rules in force from time to time for Indian services, the qualifying service for leave and pension reckoning from the date of his joining his first appointment.

8. Every selected candidate will, on arrival in India, be posted to the Royal Botanic Gardens, Calcutta (or to such other public garden as may be directed), as a supernumerary. His pay, while he remains a supernumerary, will be at the rate of Rs. 150 per month. When the Government appoints him to a particular post he will cease to be a supernumerary, and his pay will be increased to Rs. 200 a month. Up to the end of five years' service this pay will rise by annual increments of Rs. 5 per month. After the conclusion of five years' service the pay then reached will rise by annual increments of Rs. 10 until a maximum of Rs. 425 per month has been reached.

9. Free quarters, or an allowance in lieu thereof, will in all cases be provided.

10. It is open to a Local Government, Administration, or State to grant, under proper sanction, such extra local allowances as they may consider necessary on account of the importance of the charge, expensiveness of living, or other considerations.

11. A gardener may, by consent of the Governments concerned, be transferred from one Province or State to another without loss of pay.

12. Gardeners selected under these rules will be allowed the same privileges in the nature of exchange compensation allowance as may be granted to other officers in a similar position.

## HOW TO LIVE IN TROPICAL AFRICA.

### A GUIDE TO TROPICAL HYGIENE.

By J. MURRAY, M.D. (London: George Philip and Son.)

THIS is a handy little volume of just over 250 pages, which we notice here in the belief that it will prove especially serviceable to all who live in tropical countries, whether in Africa, Asia, or America. The author, Dr. Murray, aims chiefly at telling Europeans generally how best to live comfortably in Tropical Africa, particularly in those regions where the dread malarial fevers are so prevalent.

Since healthy and unhealthy portions of Africa have come under what the newspapers call "the British sphere of influence," great efforts have been made to turn the land and climate to some commercial account, and it is therefore not unnatural that attempts should be made to grow crops of great economic value, such as tea, coffee, cocoa, etc. It is also satisfactory to recognize that men who have been trained at Kew, and who are consequently not unacquainted with the requirements of such plants, are usually called upon to act as pioneers in this important industry. There are always men ready to go to any part of the world—even if they had to encounter the ten plagues of Egypt—and it is therefore not astonishing that Kew will always produce volunteers ready for service anywhere in the Tropics. But in Africa, as Dr. Murray points out, danger threatens at every point, rendering great care and precautions necessary. He says:—"The climates of Tropical Africa and Europe are too essentially different to admit of just comparison; and the sooner the vicious mode of describing the former in terms of the latter disappears the better."

The atmospheric humidity, rainfall, sunlight, wind, electricity, and such like natural phenomena in Tropical Africa need no comment here; but it may be as well for the prospective settler to know all about them.

The highest spots in malarial districts for dwelling are the healthiest, keeping well away from rivers, lakes, gullies, and low damp places generally, and out of the track of fever-laden winds.

9. Free quarters, or an allowance in lieu thereof, will in all cases be provided.

10. It is open to a Local Government, Administration, or State to grant, under proper sanction, such extra local allowances as they may consider necessary on account of the importance of the charge, expensiveness of living, or other considerations.

11. A gardener may, by consent of the Governments concerned, be transferred from one Province or State to another without loss of pay.

12. Gardeners selected under these rules will be allowed the same privileges in the nature of exchange compensation allowance as may be granted to other officers in a similar position.

## HOW TO LIVE IN TROPICAL AFRICA.

### A GUIDE TO TROPICAL HYGIENE.

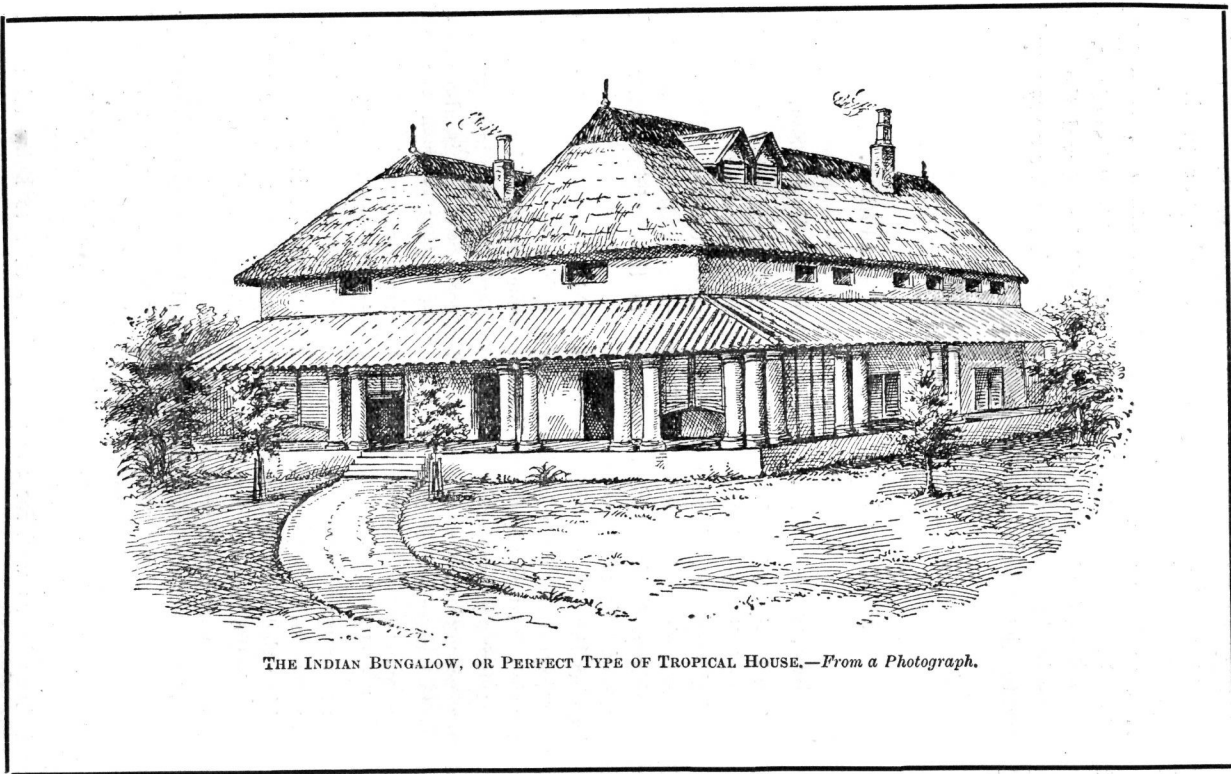
By J. MURRAY, M.D. (London: George Philip and Son.)

THIS is a handy little volume of just over 250 pages, which we notice here in the belief that it will prove especially serviceable to all who live in tropical countries, whether in Africa, Asia, or America. The author, Dr. Murray, aims chiefly at telling Europeans generally how best to live comfortably in Tropical Africa, particularly in those regions where the dread malarial fevers are so prevalent.

Since healthy and unhealthy portions of Africa have come under what the newspapers call "the British sphere of influence," great efforts have been made to turn the land and climate to some commercial account, and it is therefore not unnatural that attempts should be made to grow crops of great economic value, such as tea, coffee, cocoa, etc. It is also satisfactory to recognize that men who have been trained at Kew, and who are consequently not unacquainted with the requirements of such plants, are usually called upon to act as pioneers in this important industry. There are always men ready to go to any part of the world—even if they had to encounter the ten plagues of Egypt—and it is therefore not astonishing that Kew will always produce volunteers ready for service anywhere in the Tropics. But in Africa, as Dr. Murray points out, danger threatens at every point, rendering great care and precautions necessary. He says:—"The climates of Tropical Africa and Europe are too essentially different to admit of just comparison; and the sooner the vicious mode of describing the former in terms of the latter disappears the better."

The atmospheric humidity, rainfall, sunlight, wind, electricity, and such like natural phenomena in Tropical Africa need no comment here; but it may be as well for the prospective settler to know all about them.

The highest spots in malarial districts for dwelling are the healthiest, keeping well away from rivers, lakes, gullies, and low damp places generally, and out of the track of fever-laden winds.



THE INDIAN BUNGALOW, OR PERFECT TYPE OF TROPICAL HOUSE.—*From a Photograph.*

Drainage is an important point. Unfortunately, however, the operation is a dangerous one, as it "invites malarial infection, and nothing is more fraught with danger in the Tropics than the upturning of virgin soil." So that a settler is apparently in a dilemma—whether to catch the fever by draining or by neglecting to drain. It is natural to imagine that water coming from soil so saturated with germs of fever would be extremely dangerous, and yet, curiously enough, such does not appear to be the case. The natives do not seem to mind where they get their water, and in malarious regions they "drink river, creek, lagoon, and lake-water upon all occasions with impunity." Nevertheless Europeans should be very cautious, and Dr. Murray recommends the filtration of water before use owing to the many parasites in it.

Vegetation is a great help in keeping the atmosphere pure, and dwellings should have trees thickly planted round them, while the interiors should be made water-tight by means of concrete or cement.

It is not wise to take a walk at sunrise or sunset in malarial regions, as the difference in temperature of earth and air causes upward fever-currents from the soil. At the same time it is remarkable that in a land where the sun almost overpowers one by its torrid glow, fire should be the one great disinfectant—not only keeping the house free from damp, but at night, when the temperature falls so rapidly, protecting the body against chills. Mosquitoes are not only dangerous from their bites, but also from their carrying fever-germs about—a fact which necessitates frequent cleansing of nets and hammocks. The latter should always be slung as high as possible, as "to sleep on the ground in the tropics, however carefully the bed may be prepared, is to invite fever." Among other preventives of fever, not the least important are cleanliness and exercise of the muscles.

Should one be so unlucky as to get an attack of fever, there is every opportunity by careful nursing and knowledge of the treatment required to bring the patient back to health. Dr. Murray gives numerous remedies, which would no doubt prove beneficial if applied at the proper time. Unless, however, there are at least two or three white men together who are ever on the watch for the enemy, and who will know how to treat him when he does arrive, it would probably go hard with a white man under a native man's treatment. And yet the natives ought to know better than any one the best antidotes to fever.

It is easy to imagine how fatal mistakes are made in the Tropics by men who are in ignorance of the dangers with which they are surrounded and of the best way to cope with them. A book which points out the principal of these dangers, and at the same time prescribes simple remedies for or preventives to sickness is precisely the kind of companion that everyone in the Tropics should possess. It appears to us here at any rate that Dr. Murray's book supplies a great want, and we recommend it not only to men who are about to go to the Tropics, but also to those who are there already. It is published at Five Shillings nett. We are indebted to the publishers for the use of the illustration of a model Bungalow.



## KEW AS A UNIVERSITY OF GARDENING ;

OR, HOW TO SUCCEED AT KEW.

By F. W. BURBIDGE.

## THE ENVIRONMENT.

“WE treat our young men as ‘men’ and expect them to work out their own salvation. We wish them to be manly, self-respecting, and strenuous. We put, with the aid of the Government, what help we can in their way, and leave them to make an intelligent use of it.”

## THE EVOLUTION.

“Kew carries its influence through its men, to every part of the world.”

W. THISELTON DYER, C.M.G., *Director*.

[In K. G. J. 1894, p. 4.]

“To get employment especially, nothing is so essential as a character for never being offended, which, after all, is true dignity.”

Sir JOSEPH D. HOOKER.

ONLY yesterday I had a note from a gentleman anxious to secure “a good gardener,” but he added a short paragraph especially underlined, viz., “*I particularly wish for a man pleasant to get on with*”; and this is no doubt one of the leading wants of the times, for however skilful a gardener may be, he is much more likely to be sought after and valued if his disposition is a good-tempered and obliging one. Here, then, is the root of the matter of success: not only at Kew, but elsewhere, must a man be skilful and earnest in his work, and good-tempered and obliging, not only to those in authority over him, but also to his fellow-workmen. In a word, he must be not only a skilful gardener, but also a good and genial kind-hearted man.

We hear a good deal now-a-days about Competitive Examinations, and those who propose to gain admittance to Kew, and those who are there already, should remember that their two years’ sojourn there, *is* really one long steady competitive examination, and that without a doubt the best prizes fall to the best men. It is everywhere the same: the man who is punctual and skilful, and gives the best and pleasantest assistance, is surely the one most highly thought of, and, other things being equal, he is pretty sure of promotion.

Let us get rid, once and for ever, of the old-time fallacy that personal interest, or what is called “good luck,” is everything, or even much in our struggle for existence. A good recommendation may be, of course, and frequently is, the means of a good situation or position being obtained, but the power to *keep* such a position depends mainly on your own ability and good social qualities. The higher the position, the more you will find “to put up with,” and the more necessity is there for that ‘true

## KEW AS A UNIVERSITY OF GARDENING ;

OR, HOW TO SUCCEED AT KEW.

By F. W. BURBIDGE.

## THE ENVIRONMENT.

“WE treat our young men as ‘men’ and expect them to work out their own salvation. We wish them to be manly, self-respecting, and strenuous. We put, with the aid of the Government, what help we can in their way, and leave them to make an intelligent use of it.”

## THE EVOLUTION.

“Kew carries its influence through its men, to every part of the world.”

W. THISELTON DYER, C.M.G., *Director*.

[In K. G. J. 1894, p. 4.]

“To get employment especially, nothing is so essential as a character for never being offended, which, after all, is true dignity.”

Sir JOSEPH D. HOOKER.

ONLY yesterday I had a note from a gentleman anxious to secure “a good gardener,” but he added a short paragraph especially underlined, viz., “*I particularly wish for a man pleasant to get on with*”; and this is no doubt one of the leading wants of the times, for however skilful a gardener may be, he is much more likely to be sought after and valued if his disposition is a good-tempered and obliging one. Here, then, is the root of the matter of success: not only at Kew, but elsewhere, must a man be skilful and earnest in his work, and good-tempered and obliging, not only to those in authority over him, but also to his fellow-workmen. In a word, he must be not only a skilful gardener, but also a good and genial kind-hearted man.

We hear a good deal now-a-days about Competitive Examinations, and those who propose to gain admittance to Kew, and those who are there already, should remember that their two years’ sojourn there, *is* really one long steady competitive examination, and that without a doubt the best prizes fall to the best men. It is everywhere the same: the man who is punctual and skilful, and gives the best and pleasantest assistance, is surely the one most highly thought of, and, other things being equal, he is pretty sure of promotion.

Let us get rid, once and for ever, of the old-time fallacy that personal interest, or what is called “good luck,” is everything, or even much in our struggle for existence. A good recommendation may be, of course, and frequently is, the means of a good situation or position being obtained, but the power to *keep* such a position depends mainly on your own ability and good social qualities. The higher the position, the more you will find “to put up with,” and the more necessity is there for that ‘true

dignity' of which Sir J. D. Hooker wrote now more than thirty years ago.

It is a good rule always to remember that those above you must necessarily have many more troubles, anxieties, and responsibilities than you have yourself, and to act accordingly is your safest—indeed the only logical—course, to adopt.

Kew is the largest, best, and richest of the public establishments devoted to Botany and Plant culture in the British Islands; and just as the young scholar is prepared for the great Universities of Oxford, or Cambridge, or Dublin, so ought the more capable and ambitious of young gardeners to undergo a good course of five to seven, or even nine, years' practical training in well-managed gardens before they enter at Kew. Applicants must be over 20 and under 25 years of age, with at least five years' experience in good private gardens or nurseries. Preference is given to those who have had experience of plant-culture under glass, indeed this is a *sine quâ non*. The better the education, the more ample the practical experience of the applicant, the better are his chances of admission, and the better will he be able to reap the highest benefit from his course at Kew.

My own ideal course for a strong and healthy lad fond of gardening would be to send him to a good public school, or schools, until he was sixteen or seventeen years of age; for it is a general mistake to think, as so many do, that the best primary education is thrown away on a youth destined to become a gardener.

Even when at school his studies should, if possible, embrace at least the elements of geology and meteorology, chemistry, botany, and especially logic and political economy. Logic I look upon as especially essential, since perhaps the greatest of life's possessions is the power of clear expression, and logic enables us to analyse concisely and accurately the opinions of others, and also to express our own thoughts in a lucid manner. French and German would be an advantage, along with an elementary course of Latin; but these could be taken as leisure studies later on, unless special opportunities offered, and then the earlier they are acquired the better.

After leaving school, the next step is into a good private garden, and if any practical master of our craft could be induced to take a personal interest in him, so much the better, for it is undoubtedly a wrench of more or less severity, the leaving school to take up manual labour. His first entry into a good garden is of the utmost importance, as here he should become initiated into orderly cultural methods, and devote leisure to self-education, and especially to drawing and mensuration, both of incalculable value to the gardener. In a word, every gardener should be able to "draw his plot" well and quickly, as was the case with master builders and other head artizans in early English times. It is not necessary to do the fine work of an artist, but the gardener is always at a loss who cannot make working drawings to scale or make freehand sketches of any ordinary object with tolerable accuracy.

Everyone has, or should have, two educations, viz., the one he receives from others, and the other he acquires for himself, and the latter is, as a rule, by far the more valuable to him. If, then, the other subjects before mentioned were not taught in his school course, he should now read them up in Macmillan's excellent series of 'Science Primers,' following up special subjects still further in the larger special 'Handbook' series. It should never be forgotten that the purchase of really useful books is to the young gardener an investment rather than an expenditure. Apart, however, from the best of books and lectures, he should use his eyes and brains on the many objects of natural history that are around him, for it is not so much by actually seeing any object, as by reasoning logically about its appearances that real knowledge is gained\*. He should learn to make special studies of special things, taking any ten or twelve species of plants, any ten or twelve twigs and buds of as many hardy trees, &c., and shortly and clearly write out their main distinctions on paper, and if with rough sketches or diagrams so much the better.

In order to save time and space I will here tabulate my ideal preparatory course for a young gardener, but I do not say that it is the best or only practical one, as a dozen others might easily be formulated. All I say is that I believe it would be a good one to adopt as far as possible under ordinary circumstances.

IDEAL COURSE OF GARDENING: of *Seven to Nine Years* (viz., *The WANDER-JAHRE Plan, as an Improvement on our old seven years in one place Apprentices System*).

- Age 17 Up to this age, if possible, the lad should attend a good school or to schools.
- „ 19 †Two years in a well-managed private garden, if possible under a master interested in his training and future. I have in my mind's eye gardens like Frogmore, Chatsworth, Trentham, to Belvoir, Rangemore, Waddesden, or Burleigh.
- † Of course, four years in two different private gardens would be an additional advantage.
- „ 20 One year in a good London nursery, such as Veitch's, Low's, to Bull's, or Williams', or Sander's at St. Alban's.
- „ 21 One year in a good market nursery or garden under glass, like to Beckwith's, Rochford's, Ladds', &c., &c.
- „ 22 One year in a good French or Belgian nursery, or in the Jardin to des Plantes, Paris.
- „ 24 Two or three years at Kew, Edinburgh, or Glasnevin, &c.

The above Course would be impossible to many; still, following out something as near to it as practicable would enable a young man at, say, 23 or 24 years of age, to apply to the Kew authorities for admission with some amount of modest confidence in his training and experience.

\* Huxley tells us "that which the investigator perceives depends much more on what lies behind his sense-organs than on the object in front of them."

Kew is not intended as a general teaching school for gardeners. Its lack of fruit and vegetable departments would prevent its taking up those subjects, besides which its own special work is so wide and varied, and of such national importance, that fruit and vegetable culture may well be left to be taught elsewhere. As a University for the higher branches of Botany and Gardening, Kew is paramount, and as such offers the best advantages to all students or graduates who are admitted. This being so, it follows that all who aspire to be "Kewites" should be thoroughly well educated and trained so as to be the very best of their order, and really worthy of the solid advantages and opportunities for self-improvement which Kew offers to them.

To those fortunate young men who now actually enjoy the advantages of Kew, I would say, do your best now, whilst great privileges are in your hands, remembering that you enjoy opportunities that can never be yours again. It is, I am sure, a matter of personal pride to most of you that Kew, with all its manifold advantages and far-reaching potentialities is yours, and, in the future, no matter where your lot may be cast, whether in some quiet English garden, or abroad in Greater Britain, your heart will be loyal, and your thoughts will wander back with pleasure and pride to

"Imperial Kew, by Thames' glittering side,"

—the "alma mater" of your younger days.

#### THE MUTUAL IMPROVEMENT SOCIETY.

OUR Society progresses in usefulness and popularity. Twenty-one meetings were held during last winter, and they were nearly all devoted to papers and discussions upon practical horticulture. The average number of members present at each was thirty, a slight falling-off when compared with last year's attendance, and which was due to the large number of cases of influenza among the garden staff during the winter. Two Subscription Prizes for the two best Essays, a third given by the Chairman, and one presented by Mr. Dewar, the Curator of the Glasgow Botanic Garden, were awarded as follows:—

- |       |                     |
|-------|---------------------|
| 1st.  | Mr. W. W. PERTWEE.  |
| 2nd.  | Mr. H. F. McMILLAN. |
| *3rd. | { Mr. E. C. YOUNG.  |
|       | { Mr. J. C. MOORE.  |

The "Dewar Prize" (Johnson's 'Gardeners' Dictionary,' new edition) for the best efforts in discussion was won by Mr. W. DALLMORE.

\* There being two papers of equal merit for the third place, Mr. Nicholson gave an additional prize.

Kew is not intended as a general teaching school for gardeners. Its lack of fruit and vegetable departments would prevent its taking up those subjects, besides which its own special work is so wide and varied, and of such national importance, that fruit and vegetable culture may well be left to be taught elsewhere. As a University for the higher branches of Botany and Gardening, Kew is paramount, and as such offers the best advantages to all students or graduates who are admitted. This being so, it follows that all who aspire to be "Kewites" should be thoroughly well educated and trained so as to be the very best of their order, and really worthy of the solid advantages and opportunities for self-improvement which Kew offers to them.

To those fortunate young men who now actually enjoy the advantages of Kew, I would say, do your best now, whilst great privileges are in your hands, remembering that you enjoy opportunities that can never be yours again. It is, I am sure, a matter of personal pride to most of you that Kew, with all its manifold advantages and far-reaching potentialities is yours, and, in the future, no matter where your lot may be cast, whether in some quiet English garden, or abroad in Greater Britain, your heart will be loyal, and your thoughts will wander back with pleasure and pride to

"Imperial Kew, by Thames' glittering side,"

—the "alma mater" of your younger days.

#### THE MUTUAL IMPROVEMENT SOCIETY.

OUR Society progresses in usefulness and popularity. Twenty-one meetings were held during last winter, and they were nearly all devoted to papers and discussions upon practical horticulture. The average number of members present at each was thirty, a slight falling-off when compared with last year's attendance, and which was due to the large number of cases of influenza among the garden staff during the winter. Two Subscription Prizes for the two best Essays, a third given by the Chairman, and one presented by Mr. Dewar, the Curator of the Glasgow Botanic Garden, were awarded as follows:—

- |       |                     |
|-------|---------------------|
| 1st.  | Mr. W. W. PERTWEE.  |
| 2nd.  | Mr. H. F. McMILLAN. |
| *3rd. | { Mr. E. C. YOUNG.  |
|       | { Mr. J. C. MOORE.  |

The "Dewar Prize" (Johnson's 'Gardeners' Dictionary,' new edition) for the best efforts in discussion was won by Mr. W. DALLMORE.

\* There being two papers of equal merit for the third place, Mr. Nicholson gave an additional prize.



*Syllabus*, 1894-5.

Oct. 31.	Address on Horticulture . . . .	Mr. W. Watson, Assist. Curator.
Nov. 8.	British Botany . . . . .	Mr. G. Nicholson, Curator.
	15. Hardy Leguminosæ . . . . .	Mr. W. Dallimore.
	19. Greenhouse Amaryllids . . . .	Mr. C. Wakely.
	26. Abies and Piceas . . . . .	Mr. S. Bruun.
Dec. 3.	Roses . . . . .	Mr. G. B. Mallet.
	10. Exotic Ferns . . . . .	Mr. J. J. Gribble.
	17. Acanthaceæ . . . . .	Mr. J. W. Mathews.
	31. Stove Plants . . . . .	Mr. H. F. McMillan.
Jan. 7.	Cool Orchids . . . . .	Mr. W. Walters.
	14. A Year in West Africa . . . .	Mr. F. E. Willey.
	21. Wild Gardening . . . . .	Mr. E. C. Young.
	28. Liliums . . . . .	Mr. W. W. Pertwee.
Feb. 4.	Begonias . . . . .	Mr. F. Tribble.
	11. Gardening on the Riviera . .	Mr. F. Sander.
	18. Aroideæ . . . . .	Mr. F. Scott.
	25. Hardy Fruits . . . . .	Mr. R. Morris.
Mar. 4.	The Peach . . . . .	Mr. J. C. Moore.
	11. Impromptu Discussion.	
	18. Hardy Evergreen Shrubs . .	Mr. W. J. Bean.
	25. Garden Designs . . . . .	Mr. J. C. Newsham.

## THE LECTURES.

No change has taken place either in the Lecturers or in their methods of conducting the courses of lectures, which are as well attended as ever. An improvement has, however, been introduced into Mr. Baker's course, a portion of which is now devoted to walks and talks in the Herbaceous Ground, the Rockery, and the Arboretum. The Certificates were awarded as follows:—

**Systematic Botany.** 15 certificates.

The highest number of marks were obtained by:—Mr. G. H. Cave, 211; Mr. C. W. Avins, 198; Mr. J. J. Gribble, 192.

**Economic Botany.** 20 certificates.

The highest number of marks were obtained by:—Mr. G. H. Cave, 306; Mr. E. B. Behnick, 290; Mr. H. F. McMillan, 280.

**Geographical Botany.** 16 certificates.

The highest number of marks were obtained by:—Mr. W. W. Pertwee, 99; Mr. G. H. Cave, 94; Mr. E. B. Behnick, 93.

**Elementary Chemistry and Physics.** 14 certificates.

The highest number of marks were obtained by:—Mr. G. H. Cave, 334; Mr. F. Sander, 330; Mr. E. J. Thomas, 323.

*Syllabus, 1894-5.*

Oct. 31.	Address on Horticulture . . . .	Mr. W. Watson, Assist. Curator.
Nov. 8.	British Botany . . . . .	Mr. G. Nicholson, Curator.
	15. Hardy Leguminosæ . . . . .	Mr. W. Dallimore.
	19. Greenhouse Amaryllids . . . .	Mr. C. Wakely.
	26. Abies and Piceas . . . . .	Mr. S. Bruun.
Dec. 3.	Roses . . . . .	Mr. G. B. Mallet.
	10. Exotic Ferns . . . . .	Mr. J. J. Gribble.
	17. Acanthaceæ . . . . .	Mr. J. W. Mathews.
	31. Stove Plants . . . . .	Mr. H. F. McMillan.
Jan. 7.	Cool Orchids . . . . .	Mr. W. Walters.
	14. A Year in West Africa . . . .	Mr. F. E. Willey.
	21. Wild Gardening . . . . .	Mr. E. C. Young.
	28. Liliums . . . . .	Mr. W. W. Pertwee.
Feb. 4.	Begonias . . . . .	Mr. F. Tribble.
	11. Gardening on the Riviera . .	Mr. F. Sander.
	18. Aroideæ . . . . .	Mr. F. Scott.
	25. Hardy Fruits . . . . .	Mr. R. Morris.
Mar. 4.	The Peach . . . . .	Mr. J. C. Moore.
	11. Impromptu Discussion.	
	18. Hardy Evergreen Shrubs . .	Mr. W. J. Bean.
	25. Garden Designs . . . . .	Mr. J. C. Newsham.

---

 THE LECTURES.

No change has taken place either in the Lecturers or in their methods of conducting the courses of lectures, which are as well attended as ever. An improvement has, however, been introduced into Mr. Baker's course, a portion of which is now devoted to walks and talks in the Herbaceous Ground, the Rockery, and the Arboretum. The Certificates were awarded as follows:—

**Systematic Botany.** 15 certificates.

The highest number of marks were obtained by:—Mr. G. H. Cave, 211; Mr. C. W. Avins, 198; Mr. J. J. Gribble, 192.

**Economic Botany.** 20 certificates.

The highest number of marks were obtained by:—Mr. G. H. Cave, 306; Mr. E. B. Behnick, 290; Mr. H. F. McMillan, 280.

**Geographical Botany.** 16 certificates.

The highest number of marks were obtained by:—Mr. W. W. Pertwee, 99; Mr. G. H. Cave, 94; Mr. E. B. Behnick, 93.

**Elementary Chemistry and Physics.** 14 certificates.

The highest number of marks were obtained by:—Mr. G. H. Cave, 334; Mr. F. Sander, 330; Mr. E. J. Thomas, 323.

**British Botany.** This is now a part of the Kew curriculum, certificates being given for good collections of dried British Plants. Last year the collections sent in were exceptionally good, and 18 certificates were awarded. The best collections were those of:—

Mr. J. W. Mathews, 1st prize, given by Dr. Morris.

Mr. C. Wakely, 2nd prize, } equal, given by Dr. Morris.  
Mr. G. Arnold, 2nd prize, }

---

#### IN MEMORIAM.

UNDER this head it is proposed to give, from time to time, some particulars of the lives and works of deceased Kewites, especially of such as have distinguished themselves either in or out of the service of the establishment.

The space that can be devoted to each person is necessarily very limited, but references are given to sources of fuller information. By permission of the Director we are able to use and refer to unpublished documents preserved in the archives of the establishment.

This first contribution to the memory of notable Kewites was written by Mr. W. Botting Hemsley, who was personally acquainted with the men whose condensed biographies follow:—

JOHN SMITH, A.L.S.

(Curator of the Botanic Garden, 1841-64.)

Son of a gardener, born at Aberdour, Fife, in 1798, and died at Kew in 1888, having long outlived his wife and numerous children, most of whom died young from consumption. He entered the propagating department at Kew, under Aiton, in 1822, and in 1823 was made foreman of the same. From about 1826 he was actually Curator of the Gardens, though not nominally such until 1841, when the management was vested in the Commissioners of H.M. Woods and Forests, and Sir William Hooker was appointed Director. John Smith was so intimately connected with the gardens, his knowledge of their history during a long, critical, and interesting period was so great, and his personality familiar to such a wide circle, that it is difficult to keep a notice of him within the prescribed limits. Already in 1860 his eyesight was fast failing, yet he still prosecuted his favourite study of ferns; and he continued his literary pursuits, with the aid of an amanuensis, up to within a year or two of his death. He was elected A.L.S. in 1837, and there is an abstract of his first paper on "Ergot" on the first page of the first volume of the 'Proceedings' of the Linnean Society. His publications more particularly relating to the establishment are: 'Cultivated Ferns,' 1857, and 'Records of Kew Gardens,' 1880. The former is really an enumeration of the ferns cultivated at Kew at that date. It should be added that this was preceded by Smith's list of the ferns cultivated at Kew in 1846, published in

**British Botany.** This is now a part of the Kew curriculum, certificates being given for good collections of dried British Plants. Last year the collections sent in were exceptionally good, and 18 certificates were awarded. The best collections were those of:—

Mr. J. W. Mathews, 1st prize, given by Dr. Morris.

Mr. C. Wakely, 2nd prize, } equal, given by Dr. Morris.  
Mr. G. Arnold, 2nd prize, }

---

#### IN MEMORIAM.

UNDER this head it is proposed to give, from time to time, some particulars of the lives and works of deceased Kewites, especially of such as have distinguished themselves either in or out of the service of the establishment.

The space that can be devoted to each person is necessarily very limited, but references are given to sources of fuller information. By permission of the Director we are able to use and refer to unpublished documents preserved in the archives of the establishment.

This first contribution to the memory of notable Kewites was written by Mr. W. Botting Hemsley, who was personally acquainted with the men whose condensed biographies follow:—

JOHN SMITH, A.L.S.

(Curator of the Botanic Garden, 1841-64.)

Son of a gardener, born at Aberdour, Fife, in 1798, and died at Kew in 1888, having long outlived his wife and numerous children, most of whom died young from consumption. He entered the propagating department at Kew, under Aiton, in 1822, and in 1823 was made foreman of the same. From about 1826 he was actually Curator of the Gardens, though not nominally such until 1841, when the management was vested in the Commissioners of H.M. Woods and Forests, and Sir William Hooker was appointed Director. John Smith was so intimately connected with the gardens, his knowledge of their history during a long, critical, and interesting period was so great, and his personality familiar to such a wide circle, that it is difficult to keep a notice of him within the prescribed limits. Already in 1860 his eyesight was fast failing, yet he still prosecuted his favourite study of ferns; and he continued his literary pursuits, with the aid of an amanuensis, up to within a year or two of his death. He was elected A.L.S. in 1837, and there is an abstract of his first paper on "Ergot" on the first page of the first volume of the 'Proceedings' of the Linnean Society. His publications more particularly relating to the establishment are: 'Cultivated Ferns,' 1857, and 'Records of Kew Gardens,' 1880. The former is really an enumeration of the ferns cultivated at Kew at that date. It should be added that this was preceded by Smith's list of the ferns cultivated at Kew in 1846, published in

the 'Botanical Magazine' of that date. This, we believe, is the first list of any group of plants grown at Kew since the appearance of the second edition of Aiton's 'Hortus Kewensis,' at the beginning of the century. The latter is a collection of facts connected with the Gardens, many of them of great interest. There are some palpable errors, due, doubtless, to his affliction. He also, unfortunately, made it the vehicle of some real or imaginary grievances. Personally, "Old Jock" was not of a sympathetic nature; yet he encouraged by word and deed such young men as were really industrious and persevering. He required no relaxation himself, however, and gauged other people's wants by his own.

AUTOBIOGRAPHY: *Gardeners' Chronicle*, n. s. v. (1876) pp. 363-365, with a portrait and bibliography.

OBITUARY AND BIOGRAPHICAL NOTICES: *Gardeners' Chronicle*, 3rd series, iii. (1888) p. 216; *Proceedings of the Linnean Society*, 1887-8, p. 96; *Journal of Botany*, 1888, pp. 102-3, by J. G. Baker; *Annals of Botany*, ii. (1889) p. 429, with a bibliography.

PRINCIPAL WORKS:—

"Observations on the Cause of Ergot on Grasses," in *Transactions of the Linnean Society*, xviii. (1840) pp. 449-452.

"Notice of a Plant (*Cœlebogyne ilicifolia*) which produces perfect Seeds without any apparent action of Pollen," in *Transactions of the Linnean Society*, xviii. (1841) pp. 509-512.

"An Enumeration of the Ferns of the Philippine Islands," in *Hooker's Journal of Botany*, iii. (1841) pp. 392-422.

"An Arrangement and Definition of the Genera of Ferns," in *Hooker's Journal of Botany*, iv. (1842) pp. 38, 147; *Hooker's London Journal of Botany*, i. (1842) pp. 419, 659; ii. (1843) p. 378.

"Characters of 20 new Genera of Ferns," in *Hooker and Bauer's Genera Filicum*, 1842.

"An Enumeration of the Ferns cultivated at Kew in 1845," in *Botanical Magazine*, lxii. (1846); *Companion*, pp. 7-39.

"Enumeration of the Ferns collected during the Voyage of H.M.S. 'Herald,'" in *Seemann's Botany of H.M.S. 'Herald'*, pp. 44, 226-244, 337-344, 425-431.

'Catalogue of Ferns cultivated at Kew and other British Gardens, with Characters of the Genera.' 1857.

'Ferns, British and Foreign.' 1866.

'Domestic Botany.' 1871.

'Historia Filicum.' 1875.

'Bible Plants, their History.' 1877.

'Dictionary of Popular Names of Economic Plants.' 1882.

All in the Library at Kew.

#### ALEXANDER WILLIAMSON.

(Curator of the Pleasure Grounds, 1848-1866.)

A native of Dunkeld, born in 1819. He entered Kew as a gardener in 1843, and was for a time foreman of the Herbaceous Department. On his retiring in 1866, the separate administration of the Pleasure Grounds was abolished. Williamson was, perhaps, the only exception in his time, among the members of the Kew staff, who did not contribute in some way to the literature of the craft. He was in bad health when he retired on a pension of £98 a year, obtained, we believe, through the kind influence

of the Duchess of Cambridge; and died from consumption at Kingston in 1870.

With the exception of the eldest daughter, from whom the foregoing particulars were obtained, the whole family has died out.

DANIEL McLEOD.

(Assistant Curator of the Botanic Garden, 1858–1864.)

We have no information concerning McLeod's life before he came to Kew, which he left when old John Smith retired; the post being abolished on the appointment of the second John Smith as Curator. From Kew he went to Cachar, in Assam, to assist Mr. Thomas McMeekin (also a Kewite) in his tea plantations. Although a fine, strong-looking man, McLeod had a weak chest, and he died suddenly, from the bursting of a blood-vessel, in 1866, we believe; but, strange to say, we have been unable to find any record of his death. In his official position he was a strict disciplinarian, yet of a kind disposition and generally esteemed.

CHARLES W. CROCKER.

(Foreman of the Propagating Department, 1857–1863.)

A native of Chichester, Sussex, born in 1832, the son of Charles Crocker, Bishop's verger, and author of a guide to the cathedral and a volume of poems, which brought him more than local notoriety and the means to give his children a sound education. His son entered the Gardens in April 1855. He afterwards worked at Berlin for a year, and in 1857 he returned to Kew to be appointed foreman. In this capacity he gained the esteem and respect of his superiors, and the love and admiration of the young gardeners under his charge, whose advancement and improvement he aided and encouraged all in his power. He was a clever cultivator, a firm yet kind master, of even and amiable temperament. His great work at Kew was the propagation of Cinchonas for India. His health broke down in 1863, and he sought relief in his native city. He never recovered health, however, and died from consumption in 1868.

OBITUARY NOTICE: *Gardeners' Chronicle*, 1868, p. 242.

WRITINGS: "Notes on the Germination of certain Cyrtandreae," *Journal of the Linnæan Society*, v. p. 65, with a plate, 1861.

ALLAN A. BLACK, A.L.S.

(Curator of the Herbarium, 1853–1864.)

The son of a Presbyterian Minister of Forres, Elgin, born in 1832. He served an apprenticeship to Messrs. Henderson, nurserymen of Dunkeld, and early developed a taste for botany, which led to his being offered the post at Kew\*, which he held, so long as health permitted, with honour to himself and benefit to the establishment. Black was the first Curator

\* Britten and Boulger, 'Biographical Index of British and Irish Botanists,' p. 17, state that Black was a gardener at Kew, but I have found no confirmation of this statement.—W. B. H.



of the Herbarium. Previously, Sir William Hooker's private collection was utilized for all purposes required; but in 1853 Miss Bromfield presented her deceased brother's botanical collections and library to the Nation to be deposited at Kew; and the following year Mr. Bentham gave his still more extensive herbarium and library, on the condition that he and other botanists should have facilities for using them. Then there were the collections of the Antarctic expedition and Dr. Hooker's Indian travels; and soon specimens were pouring in from all parts of the world, so that the unassisted young Curator, who commenced on the slender stipend of sixteen shillings a week, had plenty of work and unlimited opportunities of gaining knowledge. How well he employed his time may be learnt from the sympathetic and appreciative notices cited below. In 1860 the writer was at first temporarily attached as assistant to Black. Already at that date work had commenced on the 'Genera Plantarum,' 'Flora Australiensis,' and several other of the numerous publications that have issued from Kew. Black himself published very little, but the Herbarium itself is an enduring testimony of his zeal, ability, and industry. In 1864 his health broke down, and he accepted the appointment of Superintendent of the Public Gardens at Bangalore, Madras, but he gradually got worse and died of consumption in November 1866, on a voyage from Rangoon to the Andaman Islands. He was buried in Table Island, one of the Coco group, a little to the north of the Andamans. He was much regretted by all those associated with him at Kew, and *Allanblackia*, *Oliver*\*, a distinct genus of the Clusiaceæ, was named in his memory.

OBITUARY NOTICES: *Gardeners' Chronicle*, 1866, p. 102, by Dr. J. D. Hooker; *Journal of Botany*, 1866, p. 64, by Dr. B. Seemann; *Proceedings of the Linnean Society*, 1865-66, p. lvi; *Botanische Zeitung*, 1866, p. 95, by Dr. H. G. Reichenbach.

WRITINGS:—

"Catalogue of Japan Plants, systematically arranged." *Hodgson's Residence at Nagasaki and Hakodate*, pp. 327-350, 1862. Reprinted in *Bonplandia*, x, pp. 88-100.

Lindley and Moore's *Treasury of Botany*. Numerous Articles signed A. A. B. 1866.

*Kew Correspondence*, unpublished: xxxiii, n. 23, and lvii, n. 30-32.

#### ALEXANDER SMITH.

(First Curator of the Museums of Economic Botany, 1856-1858.)

Son of Mr. John Smith, "Old Jock," born at Kew in 1832. He was an extremely amiable and industrious man; and although his formal appointment as Curator of the Museums dated only from 1856, he had worked in them from 1847, for a very trifling remuneration. During this period he wrote many volumes of notes and articles on vegetable products, which he did not live to publish. He died in May 1865, about a year after his appointment to the Herbarium as clerk to the Curator.

OBITUARY NOTICES: *Journal of Botany*, 1865, pp. 199-200; *Gardeners' Chronicle*, 1865, p. 464.

\* 'Journal of the Linnean Society,' x, p. 42, and Hooker's 'Icones Plantarum,' t. 1004.

## WRITINGS :—

“On the preparation of Sugar and Arrack from Palms in Ceylon,” *Edinburgh New Philosophical Journal*, iv. (1856) pp. 253–261.

“Notes on the Principal Plants employed in India on account of their real or supposed Febrifuge Virtues,” Markham’s *Travels in Peru and India*, pp. 546–565. 1862.

Opening of Palm Spathes with an audible noise,” *Journal of Botany*, 1863, pp. 67–76, and pp. 150–151.

Lindley and Moore’s *Treasury of Botany*. Numerous articles signed A. S. 1866.

## WALTER HOOD FITCH, F.L.S.

(Botanical Artist, Kew, 1841–1892.)

Although Fitch was not officially attached to the Gardens, he was the artist of nearly every illustrated book, official and unofficial, issued from Kew during a period of about forty years, and is therefore inseparable from Kew work. He was born at Paisley in 1817, and his family removed to Glasgow when Walter was eight years old. Having a natural taste for drawing, he was apprenticed to a firm of cotton printers, and was employed in drawing patterns. Some of his works having come under the notice of Dr. (afterwards Sir William) Hooker, the latter procured his release by redeeming his indentures, and secured his services. Fitch did such a prodigious quantity of work that a mere list of the books he illustrated would occupy some pages. Indeed almost every English botanical book of importance that appeared during his active career is embellished by his pencil. For the ‘Botanical Magazine’ alone he drew nearly three thousand plates; the first to which his name is appended being 3353, published in 1834. The plates of the Botany of the ‘*Biologia Centrali-Americana*’ (1879–1888) were almost his last work. He died in 1892, after a prolonged and distressing affliction. During the last twelve years of his life he received a pension of £100 a year from the Civil List fund.

OBITUARY NOTICES: *Journal of Botany*, 1892, pp. 100–102, with a portrait; *Gardeners’ Chronicle*, 3rd series, xi. p. 120 (1892).

## BERTHOLD CARL SEEMANN, Ph.D., F.L.S., &amp;c.

(Botanist on the Voyage of the ‘Herald,’ 1847–1851.)

A native of Hanover, born in 1825, and entered as a gardener at Kew in 1844. Appointed naturalist to the ‘Herald’ in 1846, and joined the ship early in 1847. In 1860 he went to explore the Fiji Islands, and returned with large collections of dried plants in 1861. He several times visited Central America and spent much time in Nicaragua, in connection with the Javali gold mines, where he succumbed to fever in 1871. Dr. Seemann was a man of considerable and varied abilities: a good explorer, an excellent botanist, and an accomplished and prolific writer on many subjects. He founded the German botanical periodical ‘*Bonplandia*,’ which he conducted for ten years, and then established in its place the English ‘*Journal of Botany*,’ which is still going on.

BIOGRAPHICAL NOTICES: *Journal of Botany*, x. 1872, pp. 1-7, with a portrait; *Flora Vitiensis*, Introduction, pp. xxxi-xxxiii, with a portrait.

WRITINGS:—

- 'Popular Nomenclature of the American Flora.' 1851.
- 'Botany of Voyage of H.M.S. 'Herald.' 1852-57.
- 'Narrative of Voyage of H.M.S. 'Herald.' 1853.
- 'Reise um die Welt.' 1853.
- 'Bonplandia.' 1853-62.
- 'Popular History of Palms.' 1856.
- 'British Ferns at One View.' 1860.
- 'Poisonous Plants of the Fiji Islands," in *Gardeners' Chronicle*, 1861, p. 697.
- "Notes made during a Government Expedition in the Fiji Islands," in *Gardeners' Chronicle* (1861), pp. 599, 622, 649.
- 'Viti: ' An Account of a Government Mission to the Fiji Islands in 1860-66. 1862.
- 'Journal of Botany.' 1863-71.
- 'Flora Vitiensis.' 1865-73.
- 'Letters from Nicaragua " in the *Athenæum*, 1866: these were republished in 1869, with additions and new material.
- 'Revision of the Natural Order Hederaceæ.' 1868.

All in the Library at Kew except:—'British Ferns at One View'; 'Letters from Nicaragua.'

#### RICHARD OLDHAM.

(Botanical Collector in Japan, 1861-1864.)

Born in 1837, and entered Kew as a gardener in 1859. In 1861 he succeeded Charles Wilford as botanical collector in Japan, and made very extensive and excellent collections of dried plants in that country, Manchuria, the Corean Archipelago, and Formosa; but being attached to a surveying ship, and having very limited funds at his disposal, he was unable to penetrate far into the countries he visited. However, his conduct in the East gained him many friends and admirers, who, on his premature death from dysentery in 1864, erected a granite tomb over his remains, at Amoy in China, bearing a Latin inscription from the pen of Dr. Hance.

Many of his discoveries have been named after him, but no genus, as the name was already occupied. At Kew he was deservedly a great favourite.

OBITUARY NOTICE: *Journal of Botany*, 1866, p. 329.

WRITINGS:—

*Kew Collectors*, vols. iv. and ix. (unpublished), containing his letters from the East, with notes on his plants, &c. \*

---

\* We take the opportunity of mentioning here that the following editions of the Official Guide to the Gardens are wanting to complete the Kew set:—1; 3 to 7; 9; 11 and 12; 16, 17, and 18; 20; and 26. Possibly some of the Old Kewites may be in a position to make good some of these deficiencies, and if so the Director would be greatly obliged by their doing so, and the establishment would benefit thereby to the advantage of all concerned.

PIONEERS! O PIONEERS!

" We primeval forests felling,  
 We the rivers stemming, vexing we and piercing deep the mines within,  
 We the surface broad surveying, and the virgin soil upheaving,  
 Pioneers! O pioneers!

" O to die advancing on!  
 Are there some of us to droop and die? has the hour come?  
 Then upon the march we fittest die, soon and sure the gap is filled,  
 Pioneers! Pioneers!" (WHITMAN.)

THE cause demands its victims. Not all who go out to Greater Britain win a comfortable competence and old age. We have to tell the sad story of four of our ranks who went under in the early spring of their career, three of them in tropical Africa and one in India. Their portraits, which we now publish, will be valued by all who knew them, and the record here given of their work cannot fail to win for them the admiration of all Kewites.

The letters of Messrs. Bartlett and Woodruff were published in the *Kew Bulletin* four years ago. They are reproduced here in the belief that they merit the publicity among Kewites which our Journal will obtain for them.

THE Royal Niger Company has on various occasions applied to Kew for assistance in turning to commercial account the natural products of its territory, many of which were little known in trade. In 1889 it was supplied with two picked men, George Woodruff and Harold Edmund Bartlett, from Kew, to take charge of the botanical stations which it had established in the interior.

Both men unhappily have died, the last at the commencement of the present year (1891). No blame, however, of the slightest kind can attach to the Royal Niger Company for this untoward result. It is evident that it did everything in its power to promote the health and comfort of the Kew men.

But it seems only just to place some account of the work in which they perished on record. If Kew sent them to Africa where they met their death in the attempt to do something to extend the resources of the Empire, it may at least rescue their names and memory from complete oblivion.

The letters printed below were, as will be seen, not in any way official but were addressed to former fellow gardeners at Kew. They are interesting as showing the type of men that the Royal Gardens turn out; the plucky way in which they face their difficulties, their loyalty to their employers, and the kindly feeling they entertain towards Kew. Beyond the omission of purely private matters, the letters have not been edited in any way.

## PIONEERS! O PIONEERS!

" We primeval forests felling,  
 We the rivers stemming, vexing we and piercing deep the mines within,  
 We the surface broad surveying, and the virgin soil upheaving,  
 Pioneers! O pioneers!

" O to die advancing on!  
 Are there some of us to droop and die? has the hour come?  
 Then upon the march we fittest die, soon and sure the gap is filled,  
 Pioneers! Pioneers!" (WHITMAN.)

THE cause demands its victims. Not all who go out to Greater Britain win a comfortable competence and old age. We have to tell the sad story of four of our ranks who went under in the early spring of their career, three of them in tropical Africa and one in India. Their portraits, which we now publish, will be valued by all who knew them, and the record here given of their work cannot fail to win for them the admiration of all Kewites.

The letters of Messrs. Bartlett and Woodruff were published in the *Kew Bulletin* four years ago. They are reproduced here in the belief that they merit the publicity among Kewites which our Journal will obtain for them.

THE Royal Niger Company has on various occasions applied to Kew for assistance in turning to commercial account the natural products of its territory, many of which were little known in trade. In 1889 it was supplied with two picked men, George Woodruff and Harold Edmund Bartlett, from Kew, to take charge of the botanical stations which it had established in the interior.

Both men unhappily have died, the last at the commencement of the present year (1891). No blame, however, of the slightest kind can attach to the Royal Niger Company for this untoward result. It is evident that it did everything in its power to promote the health and comfort of the Kew men.

But it seems only just to place some account of the work in which they perished on record. If Kew sent them to Africa where they met their death in the attempt to do something to extend the resources of the Empire, it may at least rescue their names and memory from complete oblivion.

The letters printed below were, as will be seen, not in any way official but were addressed to former fellow gardeners at Kew. They are interesting as showing the type of men that the Royal Gardens turn out; the plucky way in which they face their difficulties, their loyalty to their employers, and the kindly feeling they entertain towards Kew. Beyond the omission of purely private matters, the letters have not been edited in any way.

H. E. BARTLETT.  
(1889.)

c/o Royal Niger Company.  
Akassa, West Coast of Africa,  
November 3, 1889.

DEAR —,

I went ashore at Sierra Leone, and I found much to my surprise that the place is very different from what I had imagined. A hundred years and more of British rule have had their results, and, as a consequence, Sierra Leone boasts of many of the refinements of civilisation; artisans and mechanics of all descriptions ply their respective trades; and in the stores and shops nearly everything is obtainable. The price charged is not nearly so exorbitant as might be supposed, although some articles run expensive. Thus, a watchmaker charges 2s. for putting in a fresh glass, and a poor glass at that. A glass of lemonade ran me 9d. The population is of course all black. There are a few resident whites, but black par excellence is *the* colour, and there is quite as much difference between the "classes" as is observable at home. The educated natives speak English beautifully. A lawyer came on board and went as far as Cape Coast Castle, and it was a positive pleasure to hear that man speak; and he, in colour, was almost ebony black. I was disappointed in my wish to see Mr. Lewis (who has formed extensive plantations here), as he is still in England. I visited what is by courtesy termed a Botanical Garden. It is situated some distance from the town and is the most abject, forlorn, and neglected looking place it is possible to conceive. It is, in fact, a barren wilderness, unproductive, uninviting. On my way I saw hundreds of large black ants similar to those that came in a Wardian case to Kew some time ago. They are very venomous. The rains here are very heavy, a fact sufficiently indicated by the deep gullies and water-courses which are everywhere to be seen. I had some personal experience of their character, for it being yet the rainy season I encountered one tremendous driving storm of rain in going back to the ship.

After leaving Sierra Leone we kept the coast continually in sight, and many times I thought of Monteiro's description of it in his book, 'Angola and the River Congo.' The coast-line is low, flat, depressing; no hills or cliffs rise to break the dreary monotony, and this coast is washed by a tremendous surf; a long white line of breaking surf being visible for miles. The next place I went ashore at was Accrá (accent on the second syllable), and here I had the extreme pleasure of landing for the first time on a surf-beaten shore. The sensation is grand, exciting, perilous. The surf boat shoots suddenly into the midst of the boiling surf. The natives seize you and bear you on their shoulders high and dry to the beach. I have not much to say about Accra. It is made up principally of native mud huts, with the addition of some houses of European residents. I paid a visit to the Rev. Mr. Freeman, a retired missionary, who, at one time, was a gardener in England. He is now living in patriarchal style, surrounded by children and grand-children. In his



little garden he has vines, tomatoes, garden egg, cabbages, parsley, and other things growing more or less luxuriantly. Tomatoes flourish abundantly. After leaving Accra the coast-line got lower, more flat and depressed than before. Here and there, at scarce intervals, little mission and trading stations showed like oases in the surrounding dreariness. Looking at this interminable monotonous prospect one sighed for the bold cliffs, the verdurous hills and pleasant smiling valleys of Madeira; lovely Madeira, "where every prospect pleases and only man is vile," and man is sometimes very vile in this earthly paradise.

It was on Wednesday, October 9th, that I landed at Akassa. The passage out was a quick one, occupying 26 days, and was not marked by any episode of more than usual interest.

Akassa is the depôt through which everything passes on its way up river. It consists of two dwelling-houses, one for the white men and one for the black clerks, and a long line of stores, and a billiard room. Here I spent 10 days, waiting to be sent up river, and on Sunday, 20th, I started on board the steamer 'Kuka.' The river Niger was now at its full tide. It was the close of the rainy season, and the river had risen 40 feet from its level in the dry season. The Niger delta covers an immense tract of country, and all this district was in a state of inundation; enormous volumes of water rushing out by every available creek and river, and it is here that the mangrove swamps abound. The mangroves give a weird, fantastic appearance to the jungle; their white interlacing stems and roots forming an impenetrable barrier, through which no human being could force its way.

As we went further up the river the vegetation slowly changed its character. The country still continued level, but in place of the mangroves, which almost wholly prevailed when we started, cocoonut and oil-palms began to make their appearance, and as we proceeded the giant silk-cotton tree reared its colossal head high above the surrounding vegetation.

While the Niger flora seems to be wanting in that lofty grandeur which one almost involuntarily associates with the tropics, yet the compact and dense masses of palms, alternating and intermixed with trees of a sturdier habit, from whose branches hang pendant climbers, give the scene a charm peculiarly its own. The eye looks in vain for a bold striking effect, and is, perforce, content to pick out and admire the individual beauties of leaf and frond and stem.

After getting past the creeks of the delta, we emerged into the Niger proper. Here the true width and volume of the river was at once manifest. We were on a rolling, rushing flood, of width varying from two to six miles. Not a bank to be seen. They are all covered by the expanse of water. Like a huge lake the river looked, and hurrying on to split up and divide itself among the countless creeks that compose the jungle delta, and thence ultimately to find its way to the sea. It is while the river is at this flood that banks are swept away, and even native towns entirely obliterated. The native always builds close to

the water, for here he grows his little plantation of yams and plantains, and does his little fishing. It was about the second day that I for the first time understood what a tornado really meant. The steamer was towing a steam-launch which was moored amidships. In it were three men. In the middle of the afternoon a tornado struck us with fearful and unexpected fury, making the ship to reel and lifting all light articles and popping them overboard. The fury of the wind and rain was terrible. Suddenly there came a dreadful cry from the side and rushing over we saw the steam-launch rapidly sinking. It was incredible the quickness with which she went down. Two of the men managed to scramble on board, but the third, the engineer, was washed away. The surf-boat was at once manned and sent after him, but the poor fellow was lost. The rain fell in torrents. Within 15 minutes from the commencement the tornado ceased, and all was over.

It took three days to get to Abutshi, where I am at present. I found Woodruff here. He has shifted from Asaba, as the latter place is totally unfit for a botanic station, the soil being mostly sand. Consequently he has started here, and has made good progress. The work of the day commences early out here, and also all over the West Coast. At half-past 5 the bell rings and all the "boys" turn out and work until 10, when they stop an hour for "chop," turning to again at 11 and working on till 6 P.M., when the bell rings. That, in effect, means working from dawn to dark, as it is soon dark after 6 P.M.

I had my first attack of fever last week, but it was soon over, and in two days I was out in the plantation again. The worst time of the year is now approaching, the dry season. Limes, the fruit of *Citrus acida*, are largely used for making lime drinks, which are both cooling and refreshing. I must close up my letter within the compass of this sheet, or I shall exceed the half oz. postage, which I must ask you to pay this time. I hope to alter this state of things when I send again. We have no stamps here. You will see I have written to both of you, that will save postage, especially as you live together. Please remember me to K—, and show him this letter.

H. E. BARTLETT.

---

c/o Royal Niger Company,  
Akassa, West Coast of Africa,  
March 16, 1890.

MY DEAR —,

I must thank you very heartily for your interesting letter with its news of Kew and Kewites. Oh! the palmy days at Kew as you are so fond of remarking.

I was very much gratified and flattered by the invitation to write a paper for the Kew Gardeners' Mutual Improvement Society, and should like to have done so, but for three sufficient reasons could not.

*Firstly.* I did not get your letter until nearly February, thus not leaving time.

*Secondly.* I was in a very precarious state of health at that time and had been for two months. I did not lay up at all. I superintended all my little operations and works all the time, yet I had a terrible struggle with the climate. I kept up a stout heart and pulled through, but was near going under.

*Thirdly.* And more particularly I do not know to what extent I might compromise myself by writing home any account of the territories or Company's doings. My agreement talks glibly of heavy fines, as you know.

Well, I suppose you will be interested to know how I am getting along. I have got about 1000 acres of land which has to be all opened up and planted. The name of the plantation is the N'Kisi Creek Plantation, so named after the N'Kisi River which runs through it. I have nearly 100 men at work on the estate at present. Labourers from Lagos, men very ignorant, who have to be shown everything. I am living on the plantation in my own house built by my men under my directions. The house has two rooms, and verandah running all round. The walls are of mud, the floor ditto, and the roof of palm leaves (*Raphia vinifera*), prepared for that purpose. The rafters are of mangrove wood. At the back, but separate from the house, is the store-house, bath room, kitchen, and servants' room. I have two servants, both black—cook and house-boy. At the back of this, again, I have a little garden, in which I have planted peppers (Chilis), tomatoes, the granadilla, sour sop, the papaw, &c.

So you see my domicile is composed entirely of native materials. The palm leaves are fastened on with "tie-tie," a kind of cord or rope obtained from *Raphia vinifera* in common with the mats. It is a jolly house, situated on the top of a hill, with a splendid clear view of the Niger, from which a breeze frequently blows. It is always cool and comfortable in the house even under the fierce glare of the noonday sun. I am as comfortable as a king, and as happy as a sand boy, always remembering the sage axiom of Carlyle that happiness is obtained not so much by increasing your desires as by reducing them. I am now enjoying very good health, and can pummel the recalcitrant members of my crowd with ease. Living alone as I do, away from the stations amongst my crowd of "boys," men who are unscrupulous, and would take advantage of their boss if possible, it is necessary to keep the whip hand of them, to be firm and *be* master.

I have learnt many things during my short sojourn in this land of Goshen. I have had to work pretty hard nearly the whole of the time I have been out. I work for my own credit you understand. I want to keep up the good old name of Kew, too, if I can. We are early birds. We turn out between 4.30 and 5. At 5 I have coffee and a snack of something. At 5.30 I ring the bell, and the day's work commences virtually with daylight. The men work on until 11, and turn to again at 12, working until 6. I have breakfast about 11, and dinner at 6.30, and 8 o'clock is time to turn in.

I am dreadfully busy just now. About 20,000 coffee and cocoa plants

and 130 pods of cocoa seed arrived three days ago from Lagos as a first instalment for plantation, and there are more coming; that means business. We are going to do our level best to make the estate a big thing. I am pretty well armed in case of trouble any time. I have 21 rifles, a revolver, and about 400 cartridges by me. This morning being Sunday I had a little shooting practice; I am getting to manage the revolver very nicely. Rifles are not new to me.

With regard to climate, just now it is comparatively cool, as there are rains and tornadoes; but until quite recently it has been blazingly hot. I never stray far from the house or expose myself to the sun at any time without wearing my pith helmet. People at home may scoff at the helmet, but it is with the majority an indispensable article in the tropics. I could not stand the sun a day without my helmet.

Another matter will interest you. When I left England I was a teetotaller and a non-smoker. I am neither now. 'Tis true I drink scarcely anything; it is not obtainable. I do not think a man is any better in the tropics for teetotalism; abstinence by all means. Smoking also, in some degree, mitigates the plagues of Egypt as represented here by mosquitoes and sandflies.

The plants I took out are doing very well. The coffee plants at Abutshi are very promising. Cocoa and cotton likewise show up well. Woodruff is planting *Sansevieria* hemp now. I have been looking after the two places lately. Woodruff has been away after coffee and cocoa plants and seeds in Lagos, Fernando Po, etc., etc. You remember in the economic lectures, Jackson [Curator of the Kew Museums] said that the mango fruit tasted of tow and turpentine. Well, there is a decided flavour of these ingredients; but for all that the fruit is delicious. I am *great* on mangoes; the turpentine taste is only just as you bite the fruit; as soon as you have got a fair grip you lose the initial bad flavour.

The sour sop is a favourite fruit of mine, with its acid taste. I do not object to a pine-apple now and then. It would surprise you to see the reckless way we knife a pine. I have half a dozen hanging in my verandah now; they are very nice. The Niger region, as represented by this district, is not a gay place at all. Nature wears a somewhat solemn face; and there are not many flowers wasting their sweetness on the desert air. There is a striking lack of both flowers and fruit. In out of the way shady, watered creeks and bush many beautiful flowers have their home.

You can have no idea how densely stupid the average African is, and how incapable he is of reasoning from cause to effect. My plantation hands are from Lagos, and they know not the use of any tool. It is amusing to see them handle a spade for the first time. I have got them, or rather some of them, to turn a piece of ground something near the mark. Yet, for all, like Mark Twain's jumping frog, they have "pints." It is curious how quickly they succumb to slight sicknesses. It is not skulking altogether, as they lose their pay when not working. At turning-to time I generally find half a dozen—sometimes more—sick men squatting on my verandah. They all come to me when sick. I

give them salts largely, on the principle that if it does them little good it also does little harm.

I have had a lot of African fever since my arrival in this country, but I have never had a real knock-me-down attack. The fever is quick in its action. You feel heavy and tired; then you may or may not be taken with the *cold stage*, shivering and shaking, although the temperature is over 90° in the shade. This for an hour, or several hours, and it gradually passes off, leaving you in the hot stage. You are now burning hot and dry, not a drop of sweat about you; you fall into a semi-unconscious state, and awake to find yourself beginning to perspire. The whole business is over in about four hours, but it leaves a man very weak. Last week I had the fever, as described, three days following.

H. E. BARTLETT.

---

Medical Headquarters, Asaba,  
18th May, 1890.

MY LORD AND GENTLEMEN,

I am very sorry to have to inform you that Mr. H. E. Bartlett, of the Onitsha Plantation, died on May 16, 1890.

Cause of death: Remittent fever; uræmia; exhaustion.

The fever was of a very severe type, known on the coast as blackwater fever, *i. e.*, a form of remittent fever in which one of the leading symptoms is the passing of urine of a port wine, or nearly black, colour. I was in constant attendance on him, and was with him when he died.

He was buried by the Rev. H. H. Dobinson, of the Church Missionary Society, who saw him more than once before he died.

I am, &c.,

(Signed) W. H. CROSSE,  
Principal Medical Officer,  
Niger Territories.

The Royal Niger Company,  
Chartered and Limited.

---

G. WOODRUFF.  
(1889.)

---

Botanical Plantation, Abutshi,  
Niger Territories,  
20th May, 1890.

DEAR —,

You will have heard before this of Bartlett's death, I had just left him and gone back to Abutshi, and was busy reading your kind and welcome letter when the doctor sent to tell us. I never expected he would be out here long, but I thought he might get home again. He was sick nearly all the time he lived. Our work is very trying out here, having to be out most of the day. All other Europeans never go out but very little in the hot part of the day; but until we are well established it will be nothing but hard work, and unless a man is a thorough practical gardener he will find it very hard here, as everything is from the commencement; it is very different to going out to a place already made for you, and it takes very little worry to make you sick here.

It will not be so hard in two or three years' time. It is not only knowing your work, but you must know how to manage men and be able to teach them, as when you get them they cannot use a spade or anything. I have it hard now, as I am one day at my own place and one at the other. I am pleased to say I am getting my plantation to look a little like a botanic garden. It is about  $8\frac{1}{2}$  acres, and by the end of this year I hope to have it most all planted. When the Earl of Scarborough was here, he came through the plantation. He said I had done wonderfully well in so short a time, and that it was better than Lagos Botanical Station, or anything he had seen since he left Madeira, and the plants he said were looking well; he had never seen, taking the plants all round, anything looking so healthy. While I was at Lagos for plants I paid a visit to the Botanical Station, and was well received by Mr. McNair, the Curator. It looks to be about  $3\frac{1}{2}$  acres.

We also went to St. Thomas's Island for coffee and cocoa plants. I did not see much of the island, but the flora appears to be similar to the Niger. We have about 23,000 coffee and 27,000 cocoa to be planted this year at the new place Bartlett started. I have collected about 4000 *Sansevieria guineensis*, and planted them; the leaves grow quite 5 feet long, and produce splendid hemp. They are difficult to get, as they are only found here and there like most things out here. I hope some day to have a good turn in the bush, but I am afraid it will be some time before I shall have time enough to go properly into it, so that you must not expect much from me at present. The only things we have not been very successful with are *Ipecacuanha* and *Vanilla*. During the time I was away for plants they went back; I have just got them round again, and hope they will do better. Tea grows well here; at present we have the six plants sent out of Assam, and I have 12 cuttings struck. They grow without any shade, and keep nice and green. Some of them have made 1 foot of new growth in a month, which I should think was good. We have nearly two hundred of *Piper nigrum*, and the Patchouli about the same. *Piper longum* grows very slowly, and will not suit here at all. I have had some seeds from Lagos; they are all up, and some planted out—*Bauhinias*, *Sesbanias*, *Acacias*, *Salvia coccinea*, &c., which will help us in the flower way, but nothing of much value. We are just about commencing the rainy season, when everything must be planted out to be able to stand the next dry season. I expect we shall have to start a cotton plantation this year; I have sent home a sample, although not a good one, as they were late being sown, owing to my shifting from one place to another, and they had not finished their growth when the dry season set in. The tobacco from seed of our own saving from the few plants I managed to bring from Asaba have done much better this time, and I hope this year we shall get some fine leaves. If we succeed we can grow two crops in the year. I find that as we get the ground worked more stones begin to appear; so I expect as we go on we shall have plenty by-and-by. If we get a good lot of stones to keep the soil open a little we shall be able to grow almost anything. The coffee that



we put in last year has flowered a little, and I hope next year to get enough from them for seed. I have this year put in 15,000 seeds to be put out next year; they are coming up very well so far. They take six weeks to germinate, and in that time they have so many chances of being washed in by tornadoes, &c.

The first part of this letter I wrote while at the other plantation.

At Abutshi, where my garden is, we have plenty of company, as it is the depôt for everything going up or coming down the river, so that everybody going up or coming down stops here. There could not be a better place for a botanic garden, and we are always six in the house, and all very nice men. We live well, better than you would think possible in so wild a country. We have coffee at 5.30 A.M., breakfast 10 A.M., luncheon 2 P.M., dinner 6.30 P.M. We have very little expenditure; even our washing is done, for a washman is kept on the place. I saved £100 during my first year, and I expect there are few places going nowadays where you can do that.

The other plantation is quite away from anybody; you have your own house-steward, cook, etc., etc., and are master of your own house, and when it is all planted up it will be a fine place. The house is built about 100 feet above the river, and ought to be healthy. It is when you have to live down among the swamps that it is so trying; altogether, a man can be quite happy out here if he keeps his health. A little sickness out here pulls one down very much.

The way I shade my nursery is this: I have beds made 4 feet wide, leaving a walk 3 feet between each. We then get forked sticks, about 3 feet out of the ground, tie bamboos right along the forked sticks; then put bamboos across the top, and cover with palm-leaves. Then, when you want to harden anything to the sun after they are up, just take a few palm leaves off every day or so till they are exposed altogether. They being built so low, a tornado never blows the leaves off; and now that I have had a year here, and know what weather to expect and the best way to sow things, I am very successful. I have succeeded with everything I have put in this season so far.

I have not been able to dry any specimens yet, but we have just built a tool-shed, seed-room, and office, so that I hope to dry some next flowering-season.

G. WOODRUFF.

---

Asaba, River Niger,  
17th January, 1891.

I REGRET to have to inform you that Mr. Woodruff died at Asaba on January 2nd, 1891, from blackwater fever, followed by inflammation of his kidneys.

I have to inform you that, before he died, Mr. Woodruff made a will, by which it is arranged that his property is to be sold and the proceeds, together with his balance of wages, divided equally between his sister and his fiancée. As soon as I conveniently can, this will be carried out.

Please let me know what amount stands to his credit in the London books, and should he have left an allotment, perhaps it will be as well to stop it.

His effects may realize about £15.

(Signed) W. H. CROSSE.

MR. WILLIAM CROWTHER.

(1890.)

THE late Curator of the Botanical Station at Aburi, Gold Coast, was an exemplary Kewite and Colonist. A man of fine physique, well informed, clear-headed, full of enthusiasm, and with plenty of go in him, he had at the same time a good ballast of Yorkshire shrewdness and judgment. Whilst at Kew he was generally esteemed, and his studious habits soon attracted the attention of the authorities, and led to his being selected for the newly-created post in Aburi. Had he lived he would certainly have worked himself into a prominent position in Colonial work. He was only 27 years of age when he died.

Mr. Crowther was the son of the gardener at Meanwood Park, Leeds, by whom he was trained. At the age of twenty he went into the garden of the Earl of Harewood, Harewood House, Leeds, where he remained two years. In 1889 he entered Kew, and after a year's service he was appointed Curator of the Botanical Station at Aburi, which he had to make. In 1893 the Governor of the Gold Coast, Sir Brandford Griffith, recommended that Mr. Crowther should be reappointed with an increase of salary, and reported that he had performed his duties remarkably well and had been most successful in his management of the Botanical Station; so much so that people were astonished to see what a transformation he had made of the place, which covered forty acres, admirably arranged for its purpose and full of valuable economic and other useful trees and plants, besides the nurseries filled with stock to supply the demands of purchasers. By his attention and kindness to visitors, and by his quiet, unassuming, yet manly behaviour, Mr. Crowther had become a general favourite in the colony. He was fortunate, too, in enjoying good health from the first.

In the autumn of 1893 Mr. Crowther was sent on a professional tour to some of the principal islands of the West Indies, and his report on this visit, which fills some thirty pages, is an excellent account of the principal field and garden industries of the islands visited, with clear and practical directions for the cultivation and preparation of plant products likely to be valuable in Africa. He returned to Aburi in April 1894, and settled down to make the most of what he had learned during his tour; but it was not to be. At the end of February he was seized by a liver complaint, and on March 16 he died. The following is a copy of the telegram received from the Governor, Sir W. Brandford Griffith, by the Director of Kew, which we have been privileged to see:—"Grieved to

inform you that Crowther died at Aburi to day, after twenty-five days' illness from abscess of liver. His loss is very great to this Government, which he served most loyally and faithfully. He had every attention and care bestowed on him. Many here will deplore his untimely death, for he was greatly esteemed."

Of such stuff are heroes made. Mr. Crowther had done good work for his country in the little time that he had been in Africa. It is not every man who is plucky enough to go to an out-of-the-world place like the Gold Coast, with a bad reputation for malarial fever, and set about teaching the natives how to till the land. "I have not seen a white man for two months, and only one white lady since I left England," wrote Mr. Crowther six months after he went to Aburi. His death is much regretted by all who knew him at Kew.

---

MR. JOHN R. WARD.  
(1894.)

---

THE appointment of Mr. Ward to be Superintendent of the Public Gardens at Nagpur, Central Provinces, India, was notified in the last number of the 'Journal,' p. 16, where also a letter from him will be found in which he describes the country and his work, and states that the climate there was not nearly so trying to the health as he expected. The news of his death was a surprise and shock to his many friends at Kew, who had anticipated for him a successful career in India. He was a strong healthy man, full of the fire of youth, when he left Kew in January last year, and, according to the last letter received from him, neither the health nor the fire had been affected by the climate and life of Nagpur.

In February last, however, we received the following communication from his friend in Nagpur:—"You will be sorry to learn that Mr. J. R. Ward died on January 15th last of a complication of diseases, viz. measles, small-pox, and congestion of the lungs. It is thought that he caught the small-pox from one of the coolies employed in the Gardens. His death is greatly regretted by all who knew him here, for he was liked by everyone because of his kind and gentlemanly disposition."

His father wrote:—"The death of my eldest son in Nagpur has cast a gloom over his native village, where he was both loved and respected. I heard from him last month, and he wrote in the best of spirits, saying he was all right and doing well. It is ten years this month since he first started gardening, and had it pleased God to have permitted it he would have done credit to Kew."

---

MR. J. W. THOMSON.—We regret to have to record the death of this ancient Kewite, whose Reminiscences were published in the 'Journal' last year, p. 32, and whose generous donations to our funds have been of so much aid. A reference to our Report in this number will show how much more Mr. Thomson has done for the Guild. He died March 28th from an attack of influenza, in his 91st year. He visited Kew in June last year, and astonished us by his energy, activity, and great knowledge of plants, as well as entertaining us with his delightful anecdotes and reminiscences of Kew. Certainly Kew and Kewites ought to be proud of such a graduate.

---

## PRESENT KEW STAFF.

		<i>Entered Kew Service.</i>
Director.....	W. T. Thiselton-Dyer, C.M.G., C.I.E., F.R.S., Ph.D., F.L.S. ..	1875
Assistant-Director .....	Daniel Morris, C.M.G., D.Sc., M.A., F.L.S. ....	1886
Assistant (Office) .....	John Aikman .....	1888*
"    " .....	William Nicholls Winn .....	1890*
Keeper of Herbarium and Library..	John Gilbert Baker, F.R.S., F.L.S. .	1866
Principal Assistant (Phanerogams).	William Botting Hemsley, F.R.S., A.L.S. ....	1860*
"    "    (Cryptogams)..	George Masee, F.L.S. ....	1893
Assistant (Herbarium) .....	Nicholas Edward Brown, A.L.S. ..	1873
"    " .....	Robert Allen Rolfe, A.L.S. ....	1879*
"    " .....	Charles Henry Wright .....	1884
"    " .....	Sidney Alfred Skan .....	1892*
"    "    for India .....	Otto Stapf, Ph.D. ....	1891
Botanical Artist .....	Miss Matilda Smith .....	1878
Doorkeeper .....	Samuel Marshall .....	1876
Honorary Keeper, Jodrell Labora- tory.....	Dukinfield Henry Scott, F.R.S., M.A., Ph.D., F.L.S. ....	1892
Curator of Museums .....	John Reader Jackson, A.L.S. ....	1858
Assistant (Museum) .....	John Masters Hillier .....	1879
Preparer .....	George Badderly .....	1880
Curator of the Gardens .....	George Nicholson, A.L.S. ....	1873
Assistant-Curator .....	William Watson .....	1879
Foremen:—		
Arboretum .....	William J. Bean .....	1883*
Greenhouse and Ornamental Department .....	Frank Garrett .....	1886
Temperate House (Sub-tropical Department) .....	Thomas Jones .....	1888*
Herbaceous Department .....	Walter Irving .....	1890*
Storekeeper .....	George Dear .....	1884
Packer .....	William Crisp .....	1875
Assistant Clerk of the Works ....	J. Allen .....	1879

\* Entered as a young gardener.

## SUB-FOREMEN.

<i>Name.</i>	<i>Department.</i>	<i>Entered Kew Service.</i>	<i>Previous Situation.</i>
Bliss, Daniel .....	Orchids .....	Sept. 1892..	Dalkeith Palace.
Browne, John M. . . . .	Label Writer ..	Oct. 1891..	Clonard, Dundrum, Dub- lin, S.
Dallimore, William.	Arboretum ....	Feb. 1891..	Calveley Hall, Tarporley.
French, William B.	Palm House ....	Sept. 1891..	Pendell Court.
Miles, John W. . . . .	Decorative Dept. (Inside).	July 1891..	Sussex Horticultural Co.
Negus, Ernest E. . . . .	Decorative Dept. (Outside).	Feb. 1893..	Pennell & Sons, Lincoln.
Newsham, John C. . . . .	Ferrieries .....	Feb. 1892..	Reid & Bornemann, Syden- ham.
Wakely, Charles ..	Propagating Pits.	Sept. 1890..	The Ferns, Weybridge.

## PRESENT KEW STAFF.

		<i>Entered Kew Service.</i>
Director.....	W. T. Thiselton-Dyer, C.M.G., C.I.E., F.R.S., Ph.D., F.L.S. ..	1875
Assistant-Director .....	Daniel Morris, C.M.G., D.Sc., M.A., F.L.S. ....	1886
Assistant (Office) .....	John Aikman .....	1888*
"    " .....	William Nicholls Winn .....	1890*
Keeper of Herbarium and Library..	John Gilbert Baker, F.R.S., F.L.S. .	1866
Principal Assistant (Phanerogams).	William Botting Hemsley, F.R.S., A.L.S. ....	1860*
"    "    (Cryptogams)..	George Masee, F.L.S. ....	1893
Assistant (Herbarium) .....	Nicholas Edward Brown, A.L.S. ..	1873
"    " .....	Robert Allen Rolfe, A.L.S. ....	1879*
"    " .....	Charles Henry Wright .....	1884
"    " .....	Sidney Alfred Skan .....	1892*
"    "    for India .....	Otto Stapf, Ph.D. ....	1891
Botanical Artist .....	Miss Matilda Smith .....	1878
Doorkeeper .....	Samuel Marshall .....	1876
Honorary Keeper, Jodrell Labora- tory.....	Dukinfield Henry Scott, F.R.S., M.A., Ph.D., F.L.S. ....	1892
Curator of Museums .....	John Reader Jackson, A.L.S. ....	1858
Assistant (Museum) .....	John Masters Hillier .....	1879
Preparer .....	George Badderly .....	1880
Curator of the Gardens .....	George Nicholson, A.L.S. ....	1873
Assistant-Curator .....	William Watson .....	1879
Foremen:—		
Arboretum .....	William J. Bean .....	1883*
Greenhouse and Ornamental Department .....	Frank Garrett .....	1886
Temperate House (Sub-tropical Department) .....	Thomas Jones .....	1888*
Herbaceous Department .....	Walter Irving .....	1890*
Storekeeper .....	George Dear .....	1884
Packer .....	William Crisp .....	1875
Assistant Clerk of the Works ....	J. Allen .....	1879

\* Entered as a young gardener.

## SUB-FOREMEN.

<i>Name.</i>	<i>Department.</i>	<i>Entered Kew Service.</i>	<i>Previous Situation.</i>
Bliss, Daniel .....	Orchids .....	Sept. 1892..	Dalkeith Palace.
Browne, John M. . . .	Label Writer ..	Oct. 1891..	Clonard, Dundrum, Dub- lin, S.
Dallimore, William.	Arboretum ....	Feb. 1891..	Calvey Hall, Tarporley.
French, William B.	Palm House ....	Sept. 1891..	Pendell Court.
Miles, John W. . . .	Decorative Dept. (Inside).	July 1891..	Sussex Horticultural Co.
Negus, Ernest E. . . .	Decorative Dept. (Outside).	Feb. 1893..	Pennell & Sons, Lincoln.
Newsham, John C. . . .	Ferrieries .....	Feb. 1892..	Reid & Bornemann, Syden- ham.
Wakely, Charles ..	Propagating Pits.	Sept. 1890..	The Ferns, Weybridge.

## GARDENERS.

<i>Name.</i>	<i>Entered Kew Service.</i>	<i>Previous Situation.</i>
Abbott, James M. ....	Nov. 1894..	Brathy Hall, Ambleside.
Aikman, Alexander ..	Apr. 1895..	Cardiff Castle.
Auton, William J. ....	Feb. 1895..	Sion House.
Bass, Edward .....	Nov. 1888..	Trained at Kew.
Bean, George J. ....	Mar. 1895..	Round Oak, Egham.
Berryman, Charles ..	Aug. 1894..	Trewidden, Penzance.
Cave, George H. ....	Jan. 1894..	Studley Castle, Warwick.
Clark, John .....	Mar. 1894..	Hillingdon Nurseries, Uxbridge.
Davidson, William ...	Apr. 1893..	Merstham Nurseries, Surrey.
Goad, George .....	Apr. 1894..	May's Nurseries, Edmonton.
Holland, John H. ....	Oct. 1894..	Rocklands, Thornton Hough.
Hutchins, William H..	Oct. 1894..	Sander's, St. Alban's.
Kennan, James .....	Mar. 1895..	Whitehall, Carlisle.
Lawton, Charles P. ..	Sept. 1894..	Weston House, Brough.
Mallet, George B. ....	Oct. 1894..	Holmewood, Ipswich.
Martin, Thomas .....	Mar. 1889..	Trained at Kew.
Mentzel, R. ....	Oct. 1894..	Messrs. Ware, Tottenham.
Moore, John C. ....	Dec. 1893..	Broadlands, Romsey, Hants.
Morris, Richard J. ...	Apr. 1894..	Easton Lodge, Monkstown, Dublin, S.
Pertwee, William W. .	Jan. 1894..	Bull's Nurseries, Chelsea.
Rayner, Thomas C. ..	Apr. 1895..	Anderson's Nursery, Teddington.
Rourke, James .....	Mar. 1894..	Glasnevin Bot. Gard.
Sander, Frederick ....	Sept. 1894..	Sander's, St. Alban's.
Scott, Frank .....	July 1893..	Knightleys, Exeter.
Thomas, Edward J. ...	Oct. 1894..	Bishopgarth, Wakefield.
Tribble, Frederick C..	Apr. 1894..	Cardiff Castle.
Walters, William ....	Feb. 1894..	Low's Nurseries, Clapton.
Wiley, Frederick ....	June 1892..	Brownsea Castle, Dorset.
Williams, Harry ....	Nov. 1894..	Trevarno, Helston, Cornwall.
Wüg, Ove E. ....	July 1894..	Low's Nurseries, Enfield.
Young, Edwin C. ....	Oct. 1893..	Wyck Hill House, Stow-on-the-Wold.

## OLD KEWITES.

<i>Name.</i>	<i>Left Kew.</i>	<i>Present Position and Address*.</i>
Aggett, William .....	June 1888 ..	70 St. James's Road, Bermondsey, S.E.
Aherne, Michael .....	Aug. 1866.	
Aldridge, A. ....	About 1850..	N., Petersham, Surrey.
Allan, William .....	Aug. 1851 ..	H. G., Brownlow House, Lurgan.
Allen, Robert .....	Oct. 1878.	
Appleby, George .....	April 1866 ..	Went to St. Helena.
Archer, Sydney .....	Mar. 1895 ..	Hyde Park, W.
Arksey, Thomas .....	Dec. 1870 ..	Went to United States.
Armstrong, James .....	Mar. 1893.	
Armstrong, Thomas ...	Aug. 1850 ..	N., Moorville, Carlisle.
Arnold, George .....	Oct. 1894 ..	F., Hamwood, Dunboyne, co. Meath.
Ashton, Frank .....	May 1885 ..	Lewis & Co., Southgate.
Avins, Christopher W...	Oct. 1894 ..	Veitch & Sons, Chelsea.
Bahr, Halfdan .....	Oct. 1883 ..	Sonthal Colony, Guma Duar, <i>via</i> Dhubri, Assam.
Bailey, Thomas .....	Sept. 1892 ..	Ravenscourt Park, W.
Baker, William .....	Dec. 1887 ..	Curator, Bot. Gard., Oxford.
Barfoot, John .....	May 1860 ..	H. G., Sherbrook, Caterham.

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