SIR JOSEPH HOOKER.

(See Frontispiece.)

SIR JOSEPH DALTON HOOKER, greatest of botanists, travellers, and Kewites, whose official connection with Kew extended over forty years—the friend and co-worker of Darwin from 1839 till his death is a man of whom we may all feel proud. His portrait, taken when he was in his prime, will be valued by all, and his kindly expressions with regard to our Guild will be heard of with pride and pleasure.

He was appointed Assistant Director in May 1855, and succeeded his father as Director in 1865. If Sir William laid the foundations of modern Kew, it may be said of Sir Joseph that he developed it to its present magnificent proportions. He retired from the Directorship in November 1885.

As Director he was a strict disciplinarian, methodical to a fault, and with a love of order which he used to say he had caught from the Navy. Always ready to make allowances, liberal in help with kindly counsel and advice to the earnest worker, but unmerciful to the careless and slipshod, he influenced enormously the career of many who came in contact with him. He could "enthuse" beginners and rouse interest in work which before had seemed dreary and uninviting. A walk in the Gardens with Sir Joseph was always a great treat; he seemed to know every plant and everything about it.

The magnitude and value of his work can be gauged by his correspondence with Darwin, as shown in the 'Life and Letters of Charles Darwin'; and the character of the man is seen in Darwin's estimate of him. The 'Genera Plantarum,' at which he and Bentham worked for twenty years, his 'Student's Flora of the British Isles,' 'Flora of Tasmania,' 'Flora of New Zealand,' 'Himalayan Rhododendrons,' and 'The Botanical Magazine' are some of the most noteworthy of his many botanical works, whilst his 'Himalayan Journals' is admitted to be the best book of travels ever written.

He now lives at Sunningdale, Berks, and comes up to Kew four days a week, where he works like a nigger at his gigantic undertakings the 'Flora of British India' and the 'Index Kewensis.' He is still a strong man and straight as a lifeguardsman, notwithstanding his age—77 years.

Darwin, in his letters to Sir Joseph, frequently twitted him on his modesty and indifference to fame and often advised him not to work so hard. Certainly hard work has agreed with him, and the work he has done is such that his fame will live, whatever his indifference to it may be. Sir Joseph Hocker and Kew are almost synonymous.

ANNUAL REPORT.

(Read at the General Meeting held on February 26, 1894.)

THE Committee, in presenting their first Annual Report, are pleased to be able to state that the Kew Guild promises to be an unqualified success. Kewites in all parts of the world have hastened to express themselves in full sympathy with its objects and to promise their support. The first number of our Journal was received with general enthusiasm, not only by Kewites but by the Horticultural press, some of the notices in the latter being both commendatory and sympathetic. So far everything has gone well, better even than the most sanguine of us anticipated. The expenses incurred in printing and publishing the Journal and despatching it by post have been more than covered by the subscriptions of members, with the assistance obtained by means of the several advertisements. It will be seen that the cost of producing the Journal was at the rate of a shilling per copy, but looking at the quality of the paper and printing, and bearing in mind that the edition was comparatively small, the cost cannot be considered excessive.

A copy of the Journal was posted to every Kewite whose address was known. Those whose addresses were unknown and who are still desirous of procuring copies of the first number can obtain them by forwarding their subscriptions and addresses to the Secretary. We would impress upon all members the desirability of at once notifying the Secretary of any change in their address or position.

The preparation of the list of members, with their addresses and other particulars, entailed considerable labour. It is not yet perfect, but we hope to make it so with the co-operation of all who are interested.

Various suggestions with the view of strengthening the Guild and improving the Journal have been made in correspondence. Some have complained that there was not more Journal; others that it is to be issued only once a year. A few would like it to take up vexed questions in which Kewites are specially interested—in short, to dabble in what may be termed horticultural politics. One correspondent thinks we might start a Widow and Orphan Fund; another thinks a pension scheme for Kewites would be favourably received. There is no telling how far our little organization may go in time; at present, however, we think it wise to restrict ourselves to the programme at first decided upon—feeling our way till we grow strong enough and rich enough to attempt more. At the same time the Committee will always be glad to receive suggestions of a practical nature, and though it may not be possible to carry them immediately into effect, they will at least receive careful consideration.

The interest excited by the first number of the Journal augurs well for its permanent success. Kewites in India, Africa, America—in all parts in fact—have written to thank us for providing them with the means of communication with old friends of whose whereabouts they were ignorant, and also for the Kew news. "Give us plenty of news about Kew and our friends there," say some; whilst one even goes to the extreme of asking for a record of marriages and births among Kew men.

Some of the suggestions—such as, for instance, that we should publish lists of the plants cultivated at Kew, and of Kew desiderata—indicate that the objects of the Guild are not clearly perceived. The Guild is a non-official organization, and whilst the bond which unites its members is the Kew certificate, it is not any more concerned in the work of the establishment than in the doings in the Botanic Gardens of Calcutta, or Ceylon, or Jamaica. Above all, personal interest—Kewites rather than Kew—should rank first in the affairs of our Guild.

A Balance-sheet for the year 1893–94 is appended :---

Dr.						Cr.	
Subscriptions and Adver- tisements	8. 9 8	3	6	Printing of Journal Postage and Stationery Journals in hand Cash in hand	$\frac{2}{4}$	19 12 0	0 3 0
£34	. 8	3	6		£34	8	6

PROCEEDINGS,

General Meeting, Feb. 26, 1894.

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

Sixty members were present, including a few Old Kewites. The Chairman, Mr. Watson, congratulated the Guild on its promising infancy, and touched briefly upon the aims and objects of the Guild and Journal, which were chiefly to promote and sustain *esprit de corps* amongst present and past Kewites and to cherish the sentiments of veneration and regard for Kew which were entertained by almost all men who had spent a portion of their professional career there.

The Secretary read the Annual Report, the adoption of which was moved by Mr. Bean, seconded by Mr. Browne, and unanimously approved by the members.

Mr. William Denning, who left Kew forty years ago, expressed his warm approval of the Guild and Journal. He regretted to see in the list of Kewites so few names of his Kew contemporaries. He felt certain that some of them, though omitted from the list, were still alive. He suggested that an album of photographs of all Kewites should be started and kept at Kew.

Mr. William Ferguson, who left Kew thirty-two years ago, heartily

congratulated the Committee on the excellent beginning they had made. With regard to the Journal, he would like to see more prominence still given to Kew news, and trusted that it would be found convenient to publish brief records of the careers of the earlier Kewites who had since distinguished themselves.

Mr. William Goldring (1879) was, he said, delighted with the Journal, which satisfied a long-felt want. But its excellence gave him an appetite for more, and he would like to see it issued quarterly. It might also, he thought, be made the medium for the free discussion of any horticultural problem, and especially of what he might term the politics of the profession. It was time gardeners united and made a stand for their just rights. The profession could never rise to the position it really merited unless those who followed it looked sharply after their interests. Kew had great influence in the horticultural world : wherever one went, in any part of the world, if there was any horticulture at all, he was certain to meet with Kew men, or see the influence of Kew at work. There was hope in the fact that at last something, however little, was being done in the direction of that union which is strength; and it seemed to him only right that as Kew was the Imperial head of botanical and horticultural enterprise, it should also be the centre to which those through whose exertions alone it could succeed might look for sympathy and help in securing a fair and just return for their labours. Gardeners have themselves to blame for any ignominy that is put upon them and their profession.

Mr. Charles H. Curtis (1892) regretted that so few Old Kewites were present, though he did not think the comparatively small meeting indicated any want of hearty sympathy with the Guild on the part of those who had gone from the dear old place. He endorsed what had been suggested by Mr. Ferguson with regard to the Journal and distinguished Past Kewites.

The Chairman said there was wisdom in all the recommendations of those who had spoken, but that in this case the adage "Ye maun creep before ye gang" was specially applicable. It was intended to publish in each number of the Journal a brief history of every distinguished Kewite, beginning with those who were dead. In time he hoped we should have in the Journal a record of the career of every Kewite since the Gardens became national. A book in which the movements of every member are recorded had been started by the Secretary. The labour attached to the publication of the Journal annually was as much as could be undertaken by the Committee—for the present, at any rate. A large photograph of all the gardeners employed at Kew is now taken every year, and a copy with the men's names inscribed is framed and hung in the Library.

Mr. C. Wakely proposed a vote of thanks to the Committee, warmly commending them for their exertions in the cause of the Guild. This was unanimously accorded.

The Committee then recommended that Rule III. be altered to read :---

"The business of the Guild shall be conducted by a Committee consisting of five Kewites (3 permanent officials, 1 sub-foreman, and 1 young gardener) and seven Old Kewites (3 English, 1 Scotch, 1 Irish, 1 Welsh, and 1 Continental)." They also recommended that a President should be elected.

Bresident.

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

Secretary.

J. Aikman, Whitestile Road, Brentford.

Treasurer.

W. J. Bean, Royal Gardens, Kew.

Committee.

D. Bliss, Kew.

J. M. Browne, 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. Goemans, Holland.

NOTES, CORRESPONDENCE, ETC.

VISITORS TO KEW IN 1893.—The number of persons who visited the Royal Gardens during 1893 shows an increase of 379,229 on the attendance for the preceding year, and is the largest as yet recorded, except for 1890, when it reached 1,839,966.

The total number of visitors for the past year was 1,733,386, as compared with 1,354,157 in 1892. The detailed numbers for 1893 are given below :---

Month.	Numbers.	Month.	Numbers.	
		Brought forward	939,766	
January	16,405	July	197,944	
February	33,899	August	329,410	
March	135,821	September	145,593	
April	284,811	October	73,650	
May	284,586	November	27,595	
June	184,244	December	19,428	
Carried forward	939,766	Total	1,733,386	

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6

The total attendance on Sundays was 676,894; on week-days 1,056,492. The two totals used formerly almost to balance; the present disparity is accounted for by Bank Holidays. The greatest monthly attendance (August) was 329,410; the smallest monthly attendance (January) was 16,405. The greatest Sunday attendance (on June 18) was 29,891; the smallest (on December 10) was 318. The greatest week-day attendance (on May 22) was 100,737; the smallest (on January 17) was 110. (*Kew Bulletin.*)

AREA OF GLASS AT KEW.—We never knew exactly the extent of the glass-houses and frames until recently, when the Ordnance Surveyor, who has been for some time engaged in making a new map of Kew, measured it, and found that we have over $2\frac{1}{2}$ acres, the exact figures being 2.604 acres, or about 113,430 square feet enclosed under glass.

PATHS AT KEW.—Visitors who come to Kew for the first time expecting to see it all in an hour or so, generally remark that "You want a day to see all Kew." As a matter of fact you could not well walk over all the paths in a day, much less stop to look at the plants by the way; for there are nearly fifteen miles of paths outside alone, besides a mile or two under glass !

THE PALM HOUSE.—Kewites generally swear by this house when discussing big plant-structures. Here are some statistics of the house to help them :—It was built in 1848 by Decimus Burton at a cost of about £30,000. Its length is 363 ft., the central part being 138 ft. and the wings each $112\frac{1}{2}$ ft. long. The central part is 100 ft. wide and the wings 50 ft. Its highest part to top of lantern is 62 ft., the wings being 26 ft. It is heated by six large wrought-iron tubular boilers and pipes upwards of $3\frac{3}{4}$ miles in length, the mains being 10 ins. in diameter. The amount of coke used per annum for heating this house is about 1000 chaldrons.

THE CONSERVATORY (No. 4).—This house is undergoing considerable alteration and when finished, as it is hoped it will be this year, it will be greatly improved both in an architectural and cultural sense. It was built in 1792 for "New Holland" plants and added to in 1844–5. Now it is being made two feet wider and higher; light iron rafters instead of wood are being used, and the sashes glazed with wider panes. A lantern ventilator adds dignity to the appearance of the house and improves the means of ventilation. It is as popular as ever with visitors.

THE COOL FERNS.—A pit for these plants has been built in the Fernery-yard by the side of and corresponding in size with the Tropical Fern-pit. An immense improvement upon the old frame, which had to serve as a nursery for cool ferns of all kinds.

THE TEMPERATE HOUSE.—Slate slabs have been placed upon the wooden stages running all round this house, and upon these a layer of gravel. This has resulted in the improved health of the shelf-collections. Bottom ventilators have also been added. The rafters are now all draped with greenhouse climbers, which greatly improve the aspect of the house inside. The climbers grow and flower very well there, too. There is, we learn, at last some hope that this house will be completed before the end of the century. The original plan included two smaller houses, one at each end, joined on to the octagons and of the same character as the large house. Money fell short thirty years ago and the builders had to stop. About one-tenth of the cost of a small gun-boat would be ample for the completion of this magnificent house.

THE BAMBOO GABDEN.-The most important addition made to the attractions of Kew since the formation of the Rock Garden in 1882 is the Bamboo Garden, which was commenced in the spring of 1892 and which is situated near the south end of the Rhododendron Dell, within a stone's throw of the river. Bamboos of all kinds suspected to be hardy were obtained from Japan, India, and elsewhere, and, together with the few species previously represented at Kew, now form a collection of about forty distinct sorts. These, so far, have proved hardy, although severe frosts were experienced both last winter and the winter before. Horticulturists generally are astonished by the growth and sturdiness of so many Bamboos, which generally have hitherto been considered too tender to be grown outside here. The development of this garden will be watched with keen interest. Its success is seen in the number of applications now made to Kew for information with regard to hardy Bamboos. All the knowledge available both of a cultural and descriptive character has been embodied by Mr. W. J. Bean-who has charge of the Arboretum and who superintended the construction and planting of the Bamboo Garden-in a paper read before the Mutual Improvement Society and afterwards published in the 'Gardeners' Chronicle' for Feb. 10, 1894, and subsequent numbers.

THE LAKE.—The removal from the Lake of many years' accumulation of Thames mud—which has been the work of an extra gang of men for the last three winters—is at last finished. It is estimated that some 10,000 cart-loads of mud have been wheeled out and carted about the Gardens during the operation. One result of this has been to give the surface of the lake a cleaner, brighter appearance. It has also provided a valuable surface-dressing for the borders, lawns, etc. The fringing of the banks with Daffodils, and the planting of spring-flowering trees (Almonds, Cherries, etc.) on the islands, will give an additional charm to this delightful part of the Garden. The somewhat abrupt rising of the ground on the east end of the lake, which was a defect in the landscape, has been removed and the paths so remodelled as to lead visitors to points from which the beauty of the lake and its surroundings can be viewed. It may not be generally known that this lake, which is over five acres in extent, was made by Sir William Hooker in 1861–2, the terrace around the Temperate House having been formed of the excavated materials, the gravel being used for making new paths. In 1869 the lake was deepened and enlarged, the banks sloped, and the mud mixed with the gravelly soil to form a suitable compost for a Conifer garden on the south side.

THE RHODODENDRON DELL .- From the landscape point of view the great defect of Kew is its flat, unbroken surface. The only diversities of level of any importance are the Wild Garden near the Cumberland Gate and the Rhododendron Dell in the Arboretum. Both of these are artificial and, according to the "Historical Account of Kew" (Kew Bulletin, Dec. 1891), the latter was made during the reign of George III., between 1760 and 1771, by the Staffordshire Militia, then quartered at Kew. It is now one of the prettiest parts of the Gardens, and its interest and beauty have recently been much enhanced by the thinning out and replanting of many of the Rhododendrons, as well as by the introduction of several scores of the best and newest varieties. In addition to the better-known garden kinds the collection comprises all the species that are sufficiently hardy to be grown outside at Kew. There are also several beds of Camellias in this Dell, and these this spring have flowered with unusual freedom, having escaped the damaging effects of spring frosts, of which we have had little this year.

THE COLLECTION OF OAKS at Kew has much improved during the last few years, not only by the addition of a number of rare species and varieties, but also in the improved appearance and health of the older specimens. Owing, it may be, to the unsuitable character of the soil, many of the Oaks at Kew have a strong tendency to become flat-topped and stunted, and to develop a dense twiggy growth rather than clean. strong branches. Experience has proved, however, that this tendency may be almost entirely overcome by pruning and manuring. The question of tree-pruning has been discussed a good deal lately, but the mistake is frequently made of confounding the treatment of isolated specimen-trees in the garden or park with that of forest-trees grown for profit as timber. The two methods have little in common. The principles of tree-pruning were the subject of a recent lecture by the Director at a meeting of the Royal Horticultural Society. There cannot be two opinions among practical men as to the necessity of pruning, if healthy well-balanced trees are desired.

- HARDY LIGNEOUS LEGUMINOS Æ.—The soil at Kew is notoriously poor and sandy, and the only portion which can be said to possess any body at all is a breadth of stiffish clay (chiefly covered with trees) stretching from the Palm House to the Bamboo Garden. The worst, perhaps, in the whole Garden is at that part occupied by the ligneous Leguminosæ, in consequence of which the collection has always been far from satisfactory. During the winter it has been entirely re-modelled and replanted; the long straight borders have been replaced by numerous beds, and instead of a species being represented by only one or two plants, a whole bed is now devoted to a single species or group of closely-allied species. There is no class of plants which prove more effective when massed than the Cytisuses, Genistas, etc., and as between five and six hundred loads of good loam have been used in making the new beds, there is every likelihood that this collection will be a very attractive feature in the Arboretum in two or three years' time.

COLLECTION OF IVIES.—The formation of a very comprehensive collection of Ivies and the publication of a work describing and classifying the different varieties was one of the many benefits conferred on horticulture by the late Mr. Shirley Hibberd, whose well-known and popular figure was very frequently to be seen in the Gardens during the last years of his life. At his death most of his Ivies came to Kew, and the collection is now a very rich one, comprising over 100 named varieties. Up to this year, however, no proper accommodation had existed for growing or arranging them to the best advantage, but last winter the commencement of an Ivy-ground was made. This is situated among the Chestnut and Oak collections, where, at irregular intervals, large treeroots have been half buried in the earth, each one of which will be covered by a separate variety. The effect, when finished, will be pleasing.

GHENT AZALEAS have of late years considerably increased in popularity, and there are certainly no other hardy shrubs which, in the early summer, can equal them for producing brilliant masses of varied and glowing colour. Except one or two nurseries, where a speciality is made of these plants, the garden devoted to them at Kew is the most extensive, and during the month of May affords a delightful feast of colour and fragrance. Last winter the inside beds, which somewhat constricted the centre of the Azalea garden, were removed to the outside; this makes the *coup d'œil* on entering much more effective, whilst the somewhat maze-like arrangement of the beds, so charming when the plants are in flower, is still retained. The alteration also brings into greater prominence the magnificent specimens of *Magnolia conspicua* and *M. Soulangeana* in the centre, which this spring have flowered more freely than for many years.

THE 'INDEX KEWENSIS' is an index of all plant-names published up to the end of 1885, with references to the place of publication of each species and the date. It has been in preparation at Kew since January 1882, and it will probably all be published by the middle of 1895. The complete work will contain about 400,000 names and many more references. It is almost as important and useful in its way as that great work the 'Genera Plantarum,' also prepared at Kew by Sir Joseph Hooker and the late Mr. Bentham. The preparation of the 'Index' has been the work of Mr. B. Daydon Jackson and a staff of assistants, under the direction and supervision of Sir Joseph Hooker. The cost was provided for by the late Charles Darwin, to whom the necessity for such an Index was suggested by "the difficulties he had experienced in accurately designating the many plants which he had studied and ascertaining their native countries." This work has great value for horticulturists as well as botanists, and the thanks of both are due to Darwin.

THE 'KEW BULLETIN.'—Every Kewite with a taste for scientific or economic horticulture should read or, if convenient, possess this publication, which is the recognized medium for all valuable information about plants of commercial importance, such as those yielding fibres, medicine, food, etc., as well as botanical information of a general character, including important items of Kew news. According to a statement recently published in the London papers, the wife of Robert L. Stevenson, the eminent novelist, who resides at Samoa, finds the *Kew Bulletin* both useful and pleasant reading. We can honestly return the compliment by assuring Mrs. Stevenson that her husband's delightful books have many hearty admirers among the members of the Kew Staff.

JOHNSON'S GARDENER'S DICTIONARY.—Messrs. C. W. Wright (Herbarium) and D. Dewar (Glasgow Botanic Garden) have just completed a thoroughly revised and up-to-date edition of 'Johnson's Gardener's Dictionary' (G. Bell & Sons), which is first-rate in every sense—comprehensive, concise, and handy in arrangement. Mr. Wright is, we believe, responsible for the nomenclature and descriptions and Mr. Dewar for the cultural and other practical information; it is therefore unnecessary to inform Kewites that the book is now a thoroughly reliable Dictionary of all that appertains to gardening.

GARDEN PARTY AT KEW PALACE.—In June last year the then First Commissioner, Mr. Shaw Lefevre, and his wife Lady Constance set the Thames on fire with specially chartered steamer-loads of Princes, English and Foreign, Ambassadors, Lords, Members of Parliament, and shining lights of the scientific and literary worlds, who brought their wives to sip tea and eat strawberries and cream under the shade of the grand beech and chestnut-trees which surround the Palace lawn, to the music of a band and to the delight of the small-folk of Kew and Richmond. The Old Palace was got into trim, the rats and spiders ordered off, and the interior decorated with palms, ferns, and flowers. The many-windowed Palace must have rubbed its eyes and doubted its ears, and wondered if Royalty had really found its way back to its old home at Kew after all. Probably nothing like this brilliant assemblage has been seen in the Old Palace grounds at Kew since the Duke of Kent was married in the drawing-room there three quarters of a century ago.

THE STAFF DINNER.—The whole of the permanent members of the Kew Staff, from the Director to the foremen, dined together last Christmas at the Railway Station Hotel, Richmond. The Director presided, and, in the course of some felicitous after-dinner remarks, reviewed the work of the establishment and commented upon Kew affairs generally. There was a marked flavour of "Liberty, Equality, and Fraternity" in some of his observations, which was decidedly relishable to the twentyone who sat and listened "across the walnuts and the wine." Music was provided by members of the Staff, and altogether a most enjoyable evening was spent. As this is the second time that the Staff has dined together at Christmas, the annual dinner may be looked upon as an institution.

MR. GEORGE MASSEE was appointed last year to the post of Principal Assistant (Cryptogams) in the Herbarium, on the retirement of Dr. M. C. Cooke. Mr. Massee, who is a Yorkshireman, was a pupil of Spruce, the well-known botanical traveller, and first went out to South America to collect Orchids for Messrs. J. Backhouse and Sons, York. He has since become an acknowledged leading authority in Cryptogamic Botany, as well as a most successful teacher and author. He belongs to what may be called the improved school of scientists, who know how to be genial and human as well as serious and scientific.

Dr. D. H. SCOTT, F.L.S., the Keeper of the Jodrell Laboratory at Kew, gave a lecture last winter before the Richmond Athenæum on "Plants of the Coal Period," and kindly invited all the members of the Garden Staff to hear it. The lecture was most interesting, lucid, not pitched too high for ordinary folk, and as pleasant to listen to as a song well sung. The lantern-illustrations also were excellent. The general verdict of Kewites was that the lecture, whilst it probably was too good for the Richmond Athenæum, was a credit to the eminent lecturer and, of course, to Kew.

MR. GEORGE NICHOLSON, the Curator, was one of the Judges in Horticulture at the Chicago Exhibition. During his stay in the United States he visited some of the most important gardens, both public and private, an account of which occupies twenty-nine pages of the *Kew Bulletin* for February 1894. We commend the paper to anyone interested in American horticulture, more especially those who contemplate trying their luck in the States. THE VEITCH MEMORIAL MEDAL.—The Trustees of the Veitch Memorial Fund have this year awarded a medal to Mr. Nicholson, the Curator, "in recognition of his valuable labours in the preparation of the Dictionary of Gardening, etc." A similar medal was awarded in 1892 to Mr. Watson, the Assistant Curator, "in recognition of his skill as a hybridizer and cultivator of exotic plants."

PROFESSOR DANIEL OLIVER, F.R.S., who retired from the post of Keeper of the Herbarium at Kew in May 1890, after more than thirty years' service, and whose labours "contributed largely to gain for the establishment at Kew that high position which it deservedly enjoys," was awarded the Gold Medal of the Linnean Society in May 1893. The President, Professor Stewart, in recalling the many services that science owed to Professor Oliver, spoke, among other things, of his educational work—"Your 'Lessons in Botany' is the most useful elementary book we have; your 'Illustrations of the Natural Orders' and your Guides to the Museums and Gardens at Kew have been eminently useful in spreading among the people an interest in Botany, and have led many to further study." The Professor still resides at Kew, and is as hearty and active as ever.

MR. JOHN F. JEFFREY, of the Herbarium staff, has been appointed Curator of the Herbarium in the Royal Botanic Gardens, Edinburgh.

MR. WILLIAM TRUELOVE, late foreman of the Arboretum at Kew, whose retirement in April 1892 was recorded in last year's Journal, died, after a short illness, at Brixton on January 16th last, in his 72nd year. He was buried in Brompton Cemetery, the principal Garden officials attending his funeral.

MR. GEORGE DEAR, formerly seed-collector in the Herbaceous Department, was appointed Time-keeper and Store-keeper in May 1893 in succession to Mr. Granger. The latter still resides at Kew, and displays as great an interest as ever in Kew Boys. We know that Kewites all the world over have a warm feeling for dear old Granger.

MR. LEANDRÉ J. PIRET, a Belgian member of the gardening staff at Kew, has been appointed head gardener to His Excellency Prince Dyboski, who has a large garden near Sebastopol, as is shown by the salary he pays his gardener, viz. £200 a year with house etc. Mr. Piret won high opinions whilst at Kew.

MR. C. MOZLEY, who left Kew in 1880 to become foreman in the Botanic Garden at Cambridge, and was afterwards appointed head gardener at Trinity College in that town, died after a somewhat prolonged illness in February of this year. MR. CARL W. ZIMMER, a German member of the gardening staff at Kew, was appointed foreman in the Botanical Garden at Munich in July 1893. If all the Germans who enter Kew were as good practitioners and as keen after the right kind of garden-knowledge as Mr. Zimmer, both Kew and German horticulture would be the gainers.

MR. J. C. NEWSHAM (sub-foreman in the Ferneries) won, in January last, the first prize Silver Medal awarded by the Scottish Horticultural Association for the "best plan for laying out a villa garden of not more than two acres, plan to be drawn to scale."

MR. WALTER THOMSON was engaged from Kew in March last by Lord Roberts, G.C.B. etc., to take charge of his gardens at Kingsbury.

MR. DAVID MILNE has been engaged by Messrs. Kennedy & Co., Nurserymen, Dumfries, as manager of their Indoor Department. He left Kew in March last.

MR. JAMES WAUGH has been engaged by Messrs. Storrie & Storrie, Nurserymen, Glencarse, Perth, as manager of their Herbaceous Department. He left Kew in March last.

MR. ALFRED TUCKER left Kew in August last year to take the post of foreman in the Herbaceous Department in Messrs. Veitch & Sons' Nurseries, Exeter.

KEW AS A SCHOOL OF HORTICULTURE has a rival in the field in the recently established Horticultural College for Women at Swanley, which is intended for "women desirous of studying the Art and Science of Horticulture, the advantages of which have hitherto been reserved for men only." They will be taught how to manage their own estates, colonial gardens, market gardens, or gentlemen's private gardens, or to act as practical teachers of horticulture. It is true that for this training, plus "pleasant drawing and dining rooms in a refined and comfortable home, and with a lady superintendent to see them all into bed by a quarter past ten," they must pay £70 a year, which does not include washing and books, and that, after two years or so of this, head gardeners' places at "24s. a week with house and vegetables" may be, and, indeed, have been got by the women (not lady) gardeners. We make a suggestion :- Cannot some arrangement be made whereby a Kewite and a Swanley Miss can join their forces and thus be a source of strength to each other? We might then have gardeners offering their services for the outdoor department, wife to take charge of the orchids and fruit, or a woman gardener might undertake to manage a large garden, her husband to act as foreman. Kew and Swanley should certainly have a special attraction for each other. Double-barrelled gardeners would be an advantage, and their offspring would be born gardeners; but alas! gardeners as a rule are forbidden to have offspring.

MR. GUSTAV MANN (1859), ex-Conservator of Forests, Assam, writing from Munich to Mr. W. B. Hemsley in June last, expressed his approval of the Guild and Journal, as will be seen from the following extracts from his letter :---

"I have received from the Secretary of the Kew Guild a copy of the Journal for 1893, which has interested me very much. Mr. Thiselton-Dyer's likeness is very good indeed. It is most gratifying to see how Kew is becoming more and more an educational establishment for gardeners. There is, I have always thought, a need for such a school in Great Britain. In Germany there are several 'Gärtner-Lehranstalten.' I myself was trained in one of them in Brunswick; but in these young men enter at the age of 14 as apprentices, and Kew, as far as I am aware, has no apprentices at all. This is, I presume, because the authorities consider that the ordinary practical work can be learned by youngsters just as well, or better, at a nursery or other private or Government garden.

"I consider the condition that applicants must have been employed not less than 5 years in good private gardens or nurseries a very hard one, necessitating often, I think, a waste of valuable time. An ordinarily intelligent lad does not require 5 years to become intimate with the practical work; 3 years should suffice for this, and in that case the minimum age for admission at Kew might be reduced to 17 or 18 years. The Director will always have at his disposal some fairly good appointments for the best men, which should be a sufficient attraction for well-educated young men. Mind you, I do not want to criticise or find fault, quite the contrary, I think the management is highly creditable to Mr. Dyer and his staff.

"I was much amused when reading your 'Early Reminiscences' of Kew. I fared even worse than you did, as I arrived at Kew late at night from Paris and was taken by a constable to Mr. Smith's door, where, to my horror, he rang the bell and fetched the dear old man out of bed, who soon appeared at the door, with his daughter in her night-dress behind him, holding the candle. I for the moment was so horrified that I could not utter a word in English, but only tell him my name; to my great relief the constable received prompt instructions to take me at once to Mr. Charles Crocker, who had rooms in the Gardens. 'Charley' received me with open arms, and soon had a meal of cabbage cooked in English fashion ready for me, which I found difficult to swallow although dreadfully hungry; afterwards I had a room, and, if I remember rightly, shared the bed with George Batcock, just such a nice fellow as Charley Crocker but of course much younger."

MR. J. W. THOMSON (1830) of Haywards Heath, is a Kewite to be proud of, indeed we might call him the "G. O. K." He tells his own story on page 32, and he shows his generous sympathy in the following letter :---

" Dear Sir: On Wednesday next, March 21st (1894), I shall be 90 years

of age, and as a birthday gift to the Kew Guild I send you a cheque for five guineas. [He had previously subscribed a guinea.] If the Almighty, in His unbounded great goodness and merciful kindness, permits it, I shall make annually a donation to the funds of the Guild, for which I entertain warm feelings and hearty wishes for its success."

We sincerely hope that Mr. Thomson will be spared many years yet. His photograph, taken when he was 85 years of age, shows him to be strong and hale. He writes a steadier hand than many much younger men. He is indeed a Grand Old Gardener.

MR. F. W. BURBIDGE, M.A., F.L.S., (1870), has recently been appointed Superintendent of the College Park, Dublin, in addition to the Curatorship of the Botanic Gardens, a position which he has worthily held since 1879. He is a strong Kewite, in full sympathy with the objects of our Guild, and he writes :—" I will act, and do anything you like for the Guild, and if you want a short paper in my line I will gladly do one. Might I suggest that one or two of the papers in the first number were too much of the flavour of ordinary gardening journal articles? Leading or progress-inspiring papers are surely the right kind of thing, but I know its promoters cannot get all done as they would like for the Journal." Exactly so, Mr. Burbidge!

MR. WILLIAM LUNT, a member of the gardening staff, accompanied Mr. Theodore Bent's expedition to South Arabia, his special work being to collect plants, seeds, and specimens for the Kew collection. Important results are expected from this expedition, and we hope the botanical finds will not be the least important. "The objective point of my expedition," stated Mr. Bent, "is the Hadramaut, the ancient frankincense country, and one of the four ancient kingdoms of Southern Arabia, which formerly supplied the world with its more important luxuries. It is practically unknown, the only European who has visited it being a German traveller. It lies about 300 miles up the coast from Aden. We leave London on November 24th, and we expect to complete our work by about April, when we hope to return to England."

Once upon a time Kew had an *attaché* with every important Scientific Expedition into distant lands, and much good botanical and horticultural work was the outcome. It might be worth while to revive the custom, especially as there is a falling off in the new plants introduced by latterday collectors, if we except orchids.

Mr. Lunt writes as if he had had an exciting time. Here is an extract from his last letter, dated March 5, 1894:—"You will doubtless be surprised to hear that our expedition is practically at an end. Since I last wrote we made a short journey up the Wadi Sa to the north-west of Al-Ghaton, which lasted about a week. We were obliged to abandon the projected visit to Bibaroot, the people threatening to shoot us if we attempted to go. We then left for Shahr with three guides, who proved to be regular robbers. They led us astray for the express purpose of

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extracting money, induced the villagers to fire upon us, and as a climax our own camel men revolted and fired upon us. We have, however, been fortunate enough to reach the coast in safety." Mr. Lunt has promised to write an account of his trip for our Journal, which will no doubt be good reading.

MR. J. M. HENRY (1867), for the last fourteen years Superintendent of the Baroda State Gardens, has been transferred to the New Works Department under the direction of Mr. W. Goldring, who is laying out extensive parks and gardens there. Mr. Henry was succeeded by Mr. G. H. Krumbiegel.

MR. G. H. KRUMBIEGEL, Superintendent of the State Gardens at Baroda, is doing well. He gives entire satisfaction professionally, and is as great a favourite socially as he was when at Kew. Mr. Davies saw him in Bombay in February last, "looking remarkably well, and apparently having a good time of it at Baroda." Here is an account from Mr. Krumbiegel himself, from a letter dated July 20, 1893 :-- "I arrived at Baroda on Sunday, May 21, and was met at the station by Mr. Henry, who, by the way, knows a lot about Kew and Kewites which would interest you. The gardens here are splendidly laid out. Mr. Goldring's work is first-rate, though the difficulties he has had to overcome were immense. It is wonderful the effect produced by tropical Of course the gardens are not finished vet, and more vegetation. ground is added yearly. I like my duties very much; there is plenty of work and responsibility, but it is a pleasure to work in a place like this, and I feel sure that I shall be very happy here when I settle down and get used to things. The workmen are a caution; they won't work unless you are standing over them, and they require a lot of teaching. Both Mr. Henry and myself were much pleased with the Journal."

MR. ROBERT DERRY, Assistant Superintendent at Malacca, a post to which he was appointed in 1886, after three years' service in Demerara, is now taking a well-earned holiday in England. He speaks well of Malacca and the Straits generally from a health point of view. He saw the last of poor Mr. N. Cantley, the late Director at Singapore, and previously assistant at Mauritius, whither he went from Kew in 1873. He had bad health in Singapore, and died in Feb. 1888, whilst on his way to New Zealand. Mr. Derry brings home five samples of pineapple fibre (see *Kew Bulletin*, 1893, p. 368) and a fund of information about tropical cultures generally. He returns to Malacca in the autumn. Friends of Mr. Curtis, of the Penang Gardens, will be sorry to hear that his health is not good; he has lately taken a trip into the higher lands of Burma to collect plants and find health at the same time.

MR. JOHN R. WARD, a member of the gardening staff, lately appointed Superintendent of the Public Gardens at Nagpur, Central Provinces, India, left England in company with Mr. Davies in January last. So far as Kew is concerned this is a new post, of which very little appears to have been known before Mr. Ward went out. He writes :—" I cannot say much about the climate here so far, except that it is not nearly so trying to the health as I expected. Englishmen appear to like it, for they hold all the appointments here of any value. I am as well as ever and am growing stouter. I miss the long walks we used to have at Kew; one cannot walk here without soon tiring, or is it laziness? Nagpur will suit me, I think. I have a nice bungalow in the gardens and office attached, and I have a clerk, a head gardener to look after the men, and both of them speak English.

"Our garden is not large, but it is filled with all kinds of plants and we grow all the English vegetables. There are abundance of Mangoes, Loquats, Pomegranates, Guavas, Jacks, Bananas, and, best of all, the famous Nagpur Oranges. All these fruit freely here and we raise large quantities of them for sale. We have a menagerie here, too. Our grandest climbers are *Bougainvillea spectabilis*, which smothers the Casuarinas in rosy purple flowers; *Beaumontia grandiflora* climbs up the Cocoa-nut trees to a height of 80 feet; *Bignonia venusta*, a gorgeous fellow, scrambling all over several large trees of *Caryota urens*; Allamandas, *Petræa volubilis*, beautiful blue; *Roupellia grata*, the Cream Fruit, which flowers splendidly here; *Russelia juncea* is largely used for vases, and *Antigonon leptopus*, which is a miserable plant in an English stove, is here a grand picture of airy rose-coloured racemes.

"Among our Economic plants are the Teak, Bassia latifolia, Bombax malabarica—the silk-cotton tree, which a short time ago was a mass of red fleshy tubular flowers and is now covered with green fruit the size of hen's eggs. Eugenia Jambolana will soon be in bloom, and Cassia Fistula, a large tree here, will also flower shortly. Our shrubs comprise Eranthemums, Acalyphas, Oleanders, Tabernæmontanas, Meyenias, Hibiscuses, Jasminums, Hamelias, and hosts of other things which I have not yet seen in flower. Nothing is labelled here, which is a nuisance, and I have to identify the plants as best I can.

"The town of Nagpur is divided into three sections, viz. Hindoo, Native Christian and Mahomedan, and European. There are three Volunteer corps, and each possesses a reading-room, billiard-room, tennisground, and cricket club. There is a 'dance' once a week at the club I have joined and we have a fine band. Housekeeping here is better than lodgings anywhere; no more of them for me. I have got exchange compensation, which is more than others holding appointments similar to mine in other parts of India are allowed."

MR. HALFDAN BAHR, who left Kew in 1883 to go to the Calcutta Botanic Gardens, where he stayed two years and was for some time Curator there, is now Superintendent of the Southal Colony and Tea gardens in Assam, where, he says, he hopes to remain till the end. "This Colony was formed by the Reys. Boerresen and Shrefsrud, who

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obtained from the Government of Assam a grant of land for the surplus population of the Southals, an original tribe in Bengal. The grant consisted of 25 square miles of very fertile land, 30 miles distant from the Dhubri Civil Station. We have now some 1500 poor people settled here and are increasing yearly. Most of them are Christians from the Southal Pargassus. I superintend the spiritual and worldly affairs of this population; I also manage the two Tea gardens. Our teas are firstrate, samples sent to Calcutta being valued at a higher rate than any other in the market. I like the life here, far away from civilization; work of all kinds takes up most of my time and, for the rest, my wife, children, and a comfortable home with plenty of reading are amply sufficient. We have Schools, a Bank, a Dispensary, and of course a large staff of Pastors and Teachers etc., to preach the Word of God to our people."

This sounds well for the Norwegian Missionary System, and we congratulate Mr. Bahr on the success he meets with, as shown in the above extract from his letter.

MR. PETER D. G. CLARK, Curator of the Botanic Garden at Ceylon, was engaged by the Peruvian Corporation, Limited, to proceed to its "territory" in Central Peru in 1891, to report on its agri-horticultural resources. He obtained leave from his Government, called at Kew on the way, and set out for Peru, where he spent several months, had a good time, saw many things of interest, all of which he duly reported upon in a paper since printed by the Corporation, who were satisfied with his work and, to its credit, paid him well for it. Mr. Clark is back again at his old post in Ceylon. He looked well when at Kew, blushing and modest as ever, and not a bit older !

MR. HENRY J. DAVIES was appointed in January this year assistant in the Royal Botanic Gardens, Calcutta, after having served four years at Kew, and acted as subforeman in the Orchid Department for the last year and a half of that period. In a letter dated March 21st he states :--- "I am safely landed at Calcutta in the midst of a veritable garden of Eden. Ward and I had a pleasant passage. What a splendid sight the Gibraltar Rock is! The large Almond Orchards were in full bloom when we were there, and made a glorious picture. In Malta we were delighted with the big specimens, full of flower, of Brugmansias, Lantanas, Tecomas, Bougainvilleas, etc. We arrived at Bombay on February 4th and found Krumbiegel waiting for us; he had come specially, and had secured comfortable quarters for us. What a jolly nice little fellow he is ! The Victoria Municipal Garden in Bombay is the best of the several well-kept public gardens in that city. The overland journey from Bombay to Calcutta was disappointing, except that portion through the Ghauts, where there is a glorious, varied vegetation, and the train winds along the side of high mountains or crosses fearfully deep chasms. After that the scenery is as flat as Kew Green, the plains of Bengal being very monotonous. Ward and I parted company at Nagpur, and three days afterwards I found the Calcutta Gardens and Mr. Proudlock, who took me to friend Lane, who hasn't gone to Agra after all, but is staying on here. These gardens are really beautiful, but I must reserve them for a special letter."

INDIAN COTTON.—The following extract from 'The Times' of December 1870 will be interesting to Kewites in India and especially to those concerned in cotton cultivation :—

"The second batch of six well-trained gardeners from the Royal Gardens, Kew, for the cotton plantations in India, sailed last month, November 1870; the terms granted by the Indian Government are highly favourable. These men receive £40 each for outfit, a free passage, and will start at a salary of £250 per annum. The term of engagement is five years, with an annual advance, from the beginning, of £50, and a free passage back at the end of it, if desired. The services of the first batch are highly spoken of, so that for the improvement of the quality, as well as for the increased produce from the land, great things are now being done for Indian cotton. At the present time there are about 50 men, in different parts of India, in government and private employ, engaged in cultivating tea, cinchona, and cotton, who have been trained at Kew, and who owe their advancement to the unremitting interest taken by the authorities at that establishment in improving the vegetable products of India. By recent accounts from Calcutta, it is said that cotton is coming down from the country much better in quality, and in much larger quantities."

MR. WILLIAM SCOTT, who left Kew in 1881 to fill the post of assistant in the Botanic Gardens, Mauritius, was appointed Director of Forests and Botanical Gardens in that island last year in succession to Mr. John Horne, F.L.S., (1860), retired. Mr. Scott has lately visited the Seychelles to inspect and report on the proposal to establish a Botanical Station there. His report has just reached Kew, and from it we gather that the Seychelles is likely to soon possess a Botanical Station, and as the climate, vegetation, soil, etc., according to Mr. Scott, are not bad, it is likely that a Kewite will eventually become established there. An interesting note in Mr. Scott's report is that on the Double Cocoa-nut (Lodoicea seychellarum), of which he says there are a large number of trees on the valley slopes of Praslin, ranging from young plants up to specimens 70 ft. high. "I noted one tree in particular. a female, about 40 ft. high, the trunk a foot in diameter, and as straight as an arrow, with a large head of leaves, the petioles 10 ft. and the blades 9 ft. long and 7 ft. wide ; this tree bore 34 fully developed nuts." In the neighbouring island of Curieuse he found this palm in abundance, some of the specimens with petioles 16 ft. long and blades 20 ft. by 14 ft. The young plant in the Victoria house at Kew, now four years old, has a lot to do yet. It is quite healthy and is growing vigorously.

MR. HENRY MILLEN, Curator of the Botanic Station at Lagos, was in England on leave last year. He had suffered much from fever and was much pulled down when he arrived, but under the wonderfully invigorating influence of English sea-side air and probably fire-side comforts, he was quite set up again in health when he reported himself ready to return to duty, which he did in December last.

MR. WILLIAM CROWTHER, Curator of the Botanic Station at Aburi, Gold Coast, who came to England last year on leave, and afterwards went on a professional tour through the principal Botanical Gardens in the West Indies and to Demerara, returned to Kew in January last. He gave very satisfactory accounts of the Gardens he saw and the Kewites he met during his tour. Whilst at Kew he was busy preparing an official report of his trip, and probably this crowded out the paper he had promised to do for our Journal, which, however, we hope to have for next year. Mr. Crowther supports the somewhat trying climate of the West Coast exceptionally well. He has returned to Aburi, calling at Sierra Leone on his way, where he is to select a site for a Botanical Station shortly to be established there.

MESSRS. F. LEIGH and T. DAWODU, two young natives from Lagos, who have been through a three years' course of training in the Jamaica Botanical Department and at Kew, return to Lagos in May of this year, where they are to act as assistants to the Curator of the Botanic Station (Mr. Millen), starting with a salary of £100 a year. They have done well, both at the lectures and in horticulture. Mr. Dawodu's paper on "Horticulture in Jamaica," read before the Mutual Improvement Society, was most meritorious. Both of them were favourites with their confrères at Kew. Mr. Leigh played good cricket.

MR. WALTER HAYDON, who entered in April 1892, and who filled the post of *locum tenens* at Lagos during the absence on leave of Mr. Millen, the curator, has been appointed Curator of the new Botanic Station at Gambia, W. Africa, for which place he sailed in March last. Mr. Haydon was highly spoken of for his work during his short stay at Lagos. He will have an opportunity of showing what he is made of at Gambia, where he has to lay out the garden, and from what we know of him he will put his big broad back into his work, whatever that work may be. He is appointed under the conditions set forth in the *Kew Bulletin*, 1893, p. 363, and which are of sufficient interest to be quoted here :—

CURATORSHIPS IN WEST AFRICA.—" At a conference of the four West-African Governors, the Director and Assistant Director of the Royal Gardens, Kew, which was held at the Colonial Office on the 12th of September, 1893, it was decided that it was desirable that

"(1) The Curator of a Botanic Station should be made a permanent official.

"(2) His salary should be £200 a year, rising by annual increment of £16 13s. 4d. to £250 a year.

"(3) He should receive travelling allowance according to his rating.

"(4) He should be entitled to the benefit of the Colonial Regulations regarding the leave, passage, pensions, etc. of West African Officials."

MR. FRED. WILLEY, who has been acting as Curator of the Botanical Station at Aburi, Gold Coast, during the absence of Mr. Crowther, writes :—" I have now (March 1894) been out here nine months, and during that period I have enjoyed good health and have experienced no inconvenience from the climate, although it bears so bad a name. This is considered to be the healthiest spot in the colony for Europeans, and here the Government Sanitarium is situated. The climate is much better at Aburi than on the coast, though the thick mists which prevail during the rainy season are very bad. So dense are they at times in the early morning that unless a mackintosh is worn a thorough wetting must be expected.

"Aburi is about 26 miles from the coast, due north of Accra, and is situated on one of a range of hills known as the 'Aguapim Hills,' at an elevation of over 1400 feet.

"The only mode of travelling—and a most uncomfortable mode it is is by hammock which four men carry on their heads; two sets of hammock-men are required, with additional carriers for luggage. Although the distance from Accra to Aburi is so short, the journey occupies eight hours.

"The vegetation along the road across the plains is very striking. Tall grasses interspersed with arborescent Euphorbias, Sansevierias, Oil Palms (*Elæis guineensis*), and in some places scrubby bush are the most prominent features. Near the hills the vegetation becomes more dense and there are fewer trees, with occasional native plantations of Bananas, Coco (*Colocasia esculenta*), Yams, and, during the rains, Maize.

"As we ascend the hills the character of the vegetation gradually changes till we arrive at pure forest formed principally of Acacias, Silkcotton, Odum (*Chlorophora excelsa*), and other large trees, with dense underwood and gigantic climbers with tree-like stems reaching to the tops of the tallest trees.

"A few Cocoa-nut Palms are usually seen in and near native villages some miles from the coast, but they do not grow with the same luxuriance as those near the coast.

"The Botanical Station surrounds the Sanitarium and consists of about 50 acres of very fair land, eminently adapted for the successful cultivation of Cacao, Coffee, and various other economic plants. The soil is of a loamy character with a rocky subsoil. The rainfall for 1893 was 66.74 inches, and the mean shade temperature was 75.83° F.

"Many of the valuable plants received at various times from Kew have now grown into good specimens, and altogether the Station is progressing very favourably. Evidence of its beneficial influence is to be

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seen in the increased attention which the natives now pay to economic horticulture.

"I am very glad to have had the opportunity of coming out here; it has afforded me an insight into life in the Tropics, and I have gained much useful knowledge. I like Colonial work, although it is trying at times. The great difficulty here is to make the natives understand you.

"I hope the Guild is proving very successful. The annual Journal is a splendid idea; at home you can scarcely conceive how eagerly it is welcomed by any one situated as I am, and practically dependent upon it alone for news of Kew and Kew men."

MR. T. R. SIM (1879), Curator, Botanic Garden, King Williamstown, won the first prize offered by the Premier of Cape Colony for an essay on "Irrigation in Cape Colony." Mr. Sim's essay was published in the 'Cape Illustrated Magazine' in Dec. 1893 and Jan. 1894. It fills some twenty pages and is most instructive reading.

MR. WALTER DRAPER (1892), who is now in Alexandria, Egypt, sends us two papers, one on the Egyptian Date-palm, which contains much useful information, including a list of 27 of the best varieties with descriptions; the other deals with gardening generally in Egypt. We hope to be able to publish extracts from these on some future occasion.

MR. PHILIP MACMAHON, Curator at Brisbane, is as energetic in the interests of Queensland as he was in most things when at Kew. He lectures to large audiences on professional subjects, one of his lectures, which treated upon "Soils," having been reprinted by the Jamaica Government for circulation in that island. His garden suffered terribly from the great floods experienced in Queensland in February 1893, being partially destroyed, whilst his house and its contents were completely swept away. When the floods subsided they left a deposit of mud and sand all over the garden, in some places two feet deep. Hard lines ! truly; but Mr. Mark-Tapley-MacMahon set to work to build up a garden, and, by way of a start, Kew sent him a contribution of 200 packets of seeds. Before the floods the gardens were "tastefully laid out, and they abounded with tropical and subtropical trees and shrubs, and were one of the 'lions' of Brisbane."

MR. W. McHARDY (1886), formerly Curator of the Royal Botanical Garden, Calcutta, has been in Australia since 1888, and is now manager of a farm in Victoria. Every Kewite who was acquainted with the genial, generous-hearted Mac will be glad to hear that Calcutta did not do for him entirely. He is in good health again, and, as might have been expected, doing very well.

MR. THOMAS MEEHAN, whose "Reminiscences of Kew" will be found on p. 38, is an eminent citizen of Philadelphia as well as the head of an important nursery firm there, Meehan's Nursery being, according to Mr. Nicholson, a remarkable one, and should be visited by all lovers of trees, especially the North American deciduous trees and shrubs, which are grown in enormous numbers. In the 'Gardeners' Chronicle' for July last, p. 128, there is an account of an important public ceremony in Philadelphia, at which Mr. Meehan was presented by the citizens with a handsome silver plaque "in grateful acknowledgment of his services to the municipality, and specially for his efforts to promote the health and pleasure of his fellow citizens by the securing of parks and open spaces in the great city of brotherly love."

MR. A. B. WESTLAND (1883), formerly of the Hong Kong Botanic Garden, and who for a short time held the post of Superintendent of the Taj Garden. Agra, is now seeking his fortune in the United States. where we wish him luck.

MR. WILLIAM HARRIS (1881), Superintendent of the Hill Garden, Jamaica, writes :-- " I heartily thank you for the copy of the Journal, with which I am much pleased. I beg to congratulate the Committee on the successful launching of such a highly creditable publication, and one which cannot fail to be of interest to all past Kewites. Mr. Hemsley's 'Reminiscences' of Kew are most interesting, and as he has had such a long connection with the establishment, I hope he may be induced to give another instalment of his experiences. I am glad that the Journal contains information respecting important alterations and additions to the houses, etc." We learn from Mr. Crowther, who recently saw Mr. Harris in Jamaica, that he looks well, has a very comfortable home, and is the father of a family.

MR. WILLIAM CRADWICK, of the Hope Gardens, Jamaica, will shortly visit England on holiday. He is in fine form we believe, and he has not belied the high opinion formed of him as a gardener during his stay at Kew; indeed Jamaica is proud of him.

MR. WILLIAM J. THOMPSON (1889), of King's House Garden, Jamaica, visited England last year. Unfortunately he suffered in health somewhat after his arrival, but we saw him on his way back to Jamaica and he was fit enough then.

MR. JOSEPH JONES, Curator at Dominica, is doing well. He writes that the garden is doing good work, satisfies the planters (a class not easily pleased), and attracts large numbers of visitors. He superintends the public gardens in the town and the grounds attached to Government House, and he runs a nursery of important economic plants, such as Cubeb-pepper, Cloves, Coffees, and Nutmegs. Not a bad record, seeing that he left Kew for Dominica as recently as 1892!

THE MUTUAL IMPROVEMENT SOCIETY.

THIS Society grows in popularity, the meetings being attended by almost all the members of the garden staff. Altogether 24 meetings were held during the Session which opened on Oct. 12 last year and closed on March 29 last.

The attendance was far in excess of anything previously recorded. The number of Members was 53, and the average attendance was 35; the highest number present at any one meeting was 50, the lowest being 26.

The prizes this year were awarded as follows :--

For the best Essay, 1st Mr. W. DALLIMORE,

2nd ,, C. WAKELY,

3rd " J. NEWSHAM.

The prize for the most useful contributions to the discussions which followed the essays was awarded to Mr. C. Wakely.

The prizes were given, two by the Members, who subscribed for them, one by Mr. Nicholson, and one by Mr. Watson.

Mr. G. Massee, of the Herbarium, gave a lecture on Fungi, dealing specially with those forms which attack vegetable tissue, illustrating it with diagrams, etc. He contrived to make the subject highly interesting and instructive from a horticultural point of view.

Sir Joseph Hooker, who has shown the liveliest interest in the Guild, offered a prize for the best paper on "A year in the Garden," to be competed for by Members of the Society. Six papers were submitted, the prize being awarded to Mr. C. Wakely; the other competitors were Messrs. Dallimore, Newsham, McMillan, Galt, and Cooper.

List of Papers read at the Meetings held in 1893-4.

Opening Address	Mr. W. Watson, Assist. Curator.
Horticulture in the United	
States	Mr. G. Nicholson, Curator.
Hybridization	Mr. A. Galt.
The Flower Garden	Mr. J. W. Miles.
Stove Foliage Plants	Mr. H. J. Davies.
The Potato	Mr. G. Burbridge.
Cryptogams; reproduction of	Mr. S. Archer.
Hardy Bamboos	Mr. W. J. Bean.
Propagation	Mr. C. Wakely.
The uses and functions of	
Leaves	Mr. E. Cooper.
Soils	Mr. J. W. Mathews.
Manures	Mr. A. Hosking.
Notes on British Plants	Mr. J. Newsham.
Cape Heaths	Mr. C. Howlett.
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THE MUTUAL IMPROVEMENT SOCIETY.

THIS Society grows in popularity, the meetings being attended by almost all the members of the garden staff. Altogether 24 meetings were held during the Session which opened on Oct. 12 last year and closed on March 29 last.

The attendance was far in excess of anything previously recorded. The number of Members was 53, and the average attendance was 35; the highest number present at any one meeting was 50, the lowest being 26.

The prizes this year were awarded as follows :--

For the best Essay, 1st Mr. W. DALLIMORE,

2nd ,, C. WAKELY,

3rd " J. NEWSHAM.

The prize for the most useful contributions to the discussions which followed the essays was awarded to Mr. C. Wakely.

The prizes were given, two by the Members, who subscribed for them, one by Mr. Nicholson, and one by Mr. Watson.

Mr. G. Massee, of the Herbarium, gave a lecture on Fungi, dealing specially with those forms which attack vegetable tissue, illustrating it with diagrams, etc. He contrived to make the subject highly interesting and instructive from a horticultural point of view.

Sir Joseph Hooker, who has shown the liveliest interest in the Guild, offered a prize for the best paper on "A year in the Garden," to be competed for by Members of the Society. Six papers were submitted, the prize being awarded to Mr. C. Wakely; the other competitors were Messrs. Dallimore, Newsham, McMillan, Galt, and Cooper.

List of Papers read at the Meetings held in 1893-4.

Opening Address	Mr. W. Watson, Assist. Curator.
Horticulture in the United	
States	Mr. G. Nicholson, Curator.
Hybridization	Mr. A. Galt.
The Flower Garden	Mr. J. W. Miles.
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Feb. 1.	Diseases of Plants	Mr. C. W. Avins.
	Fungi	Mr. G. Massee, Herbarium.
	Gardening in Jamaica	Mr. T. Dawodu.
	The Vine	Mr. G. Arnold.
	The Carnation	Mr. A. U. Chapelow.
8.	Hardy Spring-flowering Trees	
	and Shrubs	Mr. W. Dallimore.
15.	Stove Aquatics	Mr. H. French.
22.	Filmy Ferns	Mr. W. B. French.
29.	Closing Meeting.	
	Officers	Mr. W. WATSON, Chairman.
	Officers	M. W D Damar Q

Mr. W. B. FRENCH, Secretary.

Prize Essay.

HARDY SPRING-FLOWERING TREES AND SHRUBS.

By Mr. W. DALLIMORE.

In the simpler but much more interesting style of gardening, aptly termed "Natural Gardening," which is rapidly pushing the more formal style of the last generation to the wall, hardy trees and shrubs play a most important part.

Tropical gardening in this country is an expensive luxury, and can only be afforded by the wealthy, whereas the cultivation of hardy plants is open to everyone, from the millionaire to the humblest cottager, from whose humble efforts we can often learn useful lessons in hardy plant culture. What looks more picturesque than the old thatched cottages in country villages, their walls hidden with Roses, Clematis, Honeysuckle, Jasmine, and similar plants? In our large gardens we are apt to keep these things too trim; the cottager, on the contrary, usually allows them that freedom which shows them off to advantage.

Another and most important argument in favour of the extended cultivation of hardy plants is that, after the first outlay, very little extra expense is incurred. Whilst recommending the free use of hardy trees and shrubs, it must be borne in mind that they must not be planted without due regard to their character and requirements. Examples of bad planting can be seen in some of the villa-gardens along the Richmond Road, where in an area of 30 yards by 20 yards one may see such things as Sequoias, Cedars, Cupressus, Araucarias, Limes, Robinia, Chestnut, etc. Trees like these, planted in front of houses which have such small gardens, give one an idea of what a parrot would look like with a canary-cage for its home.

As a rule shrubberies are planted far too thickly, there is too much repetition, evergreens are too extensively used, and often little or no

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As a rule shrubberies are planted far too thickly, there is too much repetition, evergreens are too extensively used, and often little or no attention is paid to them after once the planting is done. A shelter shrubbery can be made quite as attractive as any other part of the garden, providing the right things are used, and it receives proper care.

Let us glance at the first of these mistakes, thick planting. When things are planted too thickly they present to the eye a confused mass; they possess no special feature, and the whole becomes painfully monotonous. Everything when planted should be allowed room for development without encroaching on its neighbours' ground. Each species is then seen to the best advantage and sufficient shelter is afforded.

The second mistake is repetition. Everyone must have noticed how commonly the Laurel, Privet, Aucuba, Lilac, Rhododendron, and a few other things are used, though why they should be preferred to scores of others infinitely more suitable for the purpose it would be difficult to explain. The fact that a shrubbery looks better clothed during winter is no doubt one reason for such an extensive use of evergreens, but that they are overdone, especially in the neighbourhood of large towns, cannot be gainsaid. During winter the leaves become thickly coated with dust and soot, and are unable to fulfil their proper functions, the result often being half-starved, sickly-looking plants. Ample evidence of this can be seen by visiting any of the parks or gardens in the neighbourhood of London.

We may now turn to a consideration of useful spring-flowering shrubs. Only those should be chosen which can be depended on to grow and flower freely even if placed under adverse circumstances. - In this case it is unwise to go to any great expense, as plants can be selected to suit most soils and situations. Begin by trenching the ground to a depth of $2\frac{1}{2}$ feet and, if poor, manure it well. An undulated margin to the border is preferable to a straight one, provided the undulations are bold and informal, not mere wavy lines. The whole arrangement should be decided on before a commencement is made, and the planting should be done systematically. There should be little repetition ; if there are halfa-dozen or more plants of a certain thing, make a group of them and have done with it. When things are in groups they attract attention, and one good group of a certain species or variety is usually sufficient. The two beds of Daphne Mezereum near the Palm-house are most attractive as they are, but if the beds were broken up and the plants spread about singly the effect would be entirely lost.

The following plants may all be readily grown in any ordinary soil, are easily obtainable, and are inexpensive. That old favourite, the Common Lilac, is planted extensively, whilst other sorts of equal merit are comparatively scarce. In a shrubbery we might have several groups of Lilac and each one distinct. In addition to the Common Lilac, *Syringa vulgaris*, we have *S. Emodi*, with its handsome foliage and large panicles of white flowers—a most effective plant. A group of garden hybrids, such as Charles X., Philemon, Bull's double, &c., might be made; the common white, again, is always acceptable, whilst for the front of the border we have *S. chinensis*, a species which flowers profusely and usually grows from 4 feet to 6 feet high, and S. persica, a still dwarfer variety.

The Dogwoods are not seen so often as they ought to be. During the early days of March Cornus Mas forms one of the prettiest pictures, every branch thickly studded with bright yellow blossoms. Another recommendation of Cornus is the effect produced in winter by the highly coloured bark of some species, such as C. sanguinea, C. alba, and C. stolonifera; planted in masses with Snowdrops or Winter Aconite as a carpet these could not fail to attract the attention of the most careless observer.

Currants, of course, must have a share of our notice. Ribes sanguineum is an old favourite with everyone, but there are several varieties of it at present little known which are even more beautiful than the type-plant. The best of the red-flowered varieties is atrosanguineum—a striking form—the large deep red flowers being borne in great profusion. Other good varieties are album and glutinosum. The Fuchsia-flowered Gooseberry, R. speciosum, is quite distinct from any other, being of erect growth, very spiny, and the flowers bright red, with very prominent stamens. The sweetly-scented R. aureum and its variety aurantiacum are really beautiful shrubs and worth looking after. There are several other varieties, but that mentioned is by far the best. R. lacustre is pretty and worth growing.

Spiræas we might have in quantity, as the species are many and differ widely in habit. The Japanese S. Thunbergi is the earliest to flower; it has narrow leaves and bears a profusion of small white flowers during March and April. The double S. prunifolia is well worth a place, so, too, are S. arguta, S. callosa, and S. betulifolia. Neillias are closely related to the Spiræas and are equally well adapted for the shrubbery. Space should be found for N. opulifolia and its variety lutea, and N. thyrsiflora. The two former grow to a height of from 7 ft. to 9 ft., the third being of much smaller stature.

Philadelphus is an easily managed genus and one which deserves the highest praise. P. coronarius, common in gardens, is one of the best. P. speciosus is a good thing, the individual flowers being much larger than in the first-named, but less freely produced. Others of the tall-growing section worthy of cultivation are P. hirsutus, P. latifolius, and P. Satzumi. Among the dwarfer growing sorts may be mentioned P. Lemoinei and its variety erectus, both garden hybrids, and the distinct P. microphyllus, a species rarely exceeding 2 ft. in height. Deutzias should be represented by D. crenata, D. scaber, and D. gracilis.

The Almonds and Plums are numerous and rich in beautiful flowering trees and shrubs. Among the latter may be noted the double-flowered Blackthorn (*P. spinosa* fl. pl.), *P. pumila*, *P. sinensis* fl. pl., and, if the ground be good, that pretty semi-double species *P. triloba*. Southern Russia is the home of one of the most beautiful of all, viz. *Amygdalus nana*, which deserves to be extensively grown, its soft rose-coloured The grand genus Pyrus is indispensable. Among the shrubby sorts we have the beautiful Japanese P. floribunda growing some 5 ft. or 6 ft. high, and bearing in April a profusion of rich rose-coloured flowers. The scarlet-flowered Cydonia japonica is always acceptable, whilst the dwarf P. Maulei is an early and profuse flowerer, the flowers being supplemented by rich yellow, sweet-smelling fruits. A few of the taller and more upright growing species might be introduced as specimen plants, likewise some of the Plums, but to be seen at their best a grove of the most showy should be planted where they will have room to develop. P. communis, P. spectabilis, P. Malus, and P. baccata, together with the numerous varieties, are all worth growing. Cerasus serrulata should be found in every garden, as also should Cratægus coccinea, C. crusgalli, and their varieties. The Hawthorns, single and double, red and white, are very decorative, Paul's Double Scarlet being, perhaps, the best.

The Amelanchiers, or June-berries, can be grown either as dwarf trees or shrubs; whichever way they are grown they are always effective. Forsythia suspensa never looks better than when climbing over a tree. The same may be said of Clematis montana, various Honeysuckles, Jasmines, etc. Another Forsythia which is a desirable shrub is F.viridissima, and between it and F.suspensa there is a great difference, the latter being almost scandent, often trifoliolate, and the stem brown, whilst the other has shorter more rigid growths, simple leaves, and green stems. F.suspensa is the better of the two; of this there are two forms, the flowers of one having long styles, those of the other short styles, the latter being the showier.

The Leguminosæ supply us with many fine shrubs in the genera *Cytisus* and *Genista*; of the former *C. scoparius* and, its variety *pendula* with yellow flowers, the newer form *Andreanus* with reddish-brown and yellow being exceptionally valuable. *C. albus* and *C. purpureus* are among the best. Of the yellow-flowered Genistas I would recommend *G. virgata* and *G. ætnensis*, both tall, and *G. radiata*, *G. hispanica*, and *G. pilosa*, of dwarf habit. The hybrid *G. præcox* is a beautiful plant, bearing cream-coloured flowers.

The hardy Azaleas, known as Swamp honeysuckles, Ghent or American Azaleas, and A. mollis, should have a conspicuous place in every collection of hardy shrubs. I have not space to do more than name other fine plants, such as Roses, Viburnums, Weigelas, and Barberries, especially Berberis Aquifolium, B. japonica, B. Wallichiana, B. vulgaris, B. Darwini, and that gem of the genus B. stenophylla, which is to my mind one of the very best shrubs in cultivation.

We will now glance at a few of the choicer plants which require more careful treatment. They should be sheltered on the north and east sides, as some of them are rather tender when making their growth.

The border should be deeply worked, and if possible formed of good loam in one part, another of peat, and another of a mixture of peat and loam. Commencing with the peat portion, the Ericaceæ first claim our attention. The Rhododendrons and Azaleas are perhaps seen at their best when a garden is formed entirely of them. *R. dahuricum* is the earliest, its rosy-lilac flowers expanding early in February. It is closely followed by the hybrid *R. præcox*, the flowers of which are rosy-mauve and very profuse. This plant should be covered at night whilst in flower, as a very slight frost spoils it. Later flowering species are *R. ferrugineum*, *R. hirsutum*, *R. Wilsoni*, and the sweet-scented *R. fragrans*, all suitable for the border. *R. fulgens* stands well at Kew, and produces its rich crimson flowers early in spring if frosts are not too severe. *R. altaclarense* and *R. nobleanum* are good early-flowering hybrids.

Of the Azaleas I will content myself with mentioning three very distinct ones. The first to flower are the rosy-lilac A. rhombicum, A. Vaseyi, a beauty, the flowers being white flushed with rose, and A. amœna, usually grown in a greenhouse, but really as hardy as any, even as far north as Chester, where it grows well and flowers freely. Rhodora canadensis, once known as a Rhododendron, is a good early-flowering shrub, perfectly hardy, the flowers, which are rosy-purple, being produced before the leaves. Bryanthus erectus, a heath-like shrub, 6 inches high, should be grown in every garden, as it bears a profusion of pretty red flowers. B. empetriformis somewhat resembles the preceding, and is in every way as noteworthy.

Ericas comprise some useful spring-flowering shrubs. E. carnea, a good-tempered plant, growing equally well in loam or peat, brightens February and March with its pink or white flowers. E. mediterranea has pink flowers with black anthers, produced in April. The beautiful E. cinerea, with its fine varieties, including atropurpurea, atrosanguinea, and rosea, flowers in May. Daboecia polifolia should not be missed, as it flowers continuously from the middle of April until October, and is easily propagated from seeds sown in October, the seedlings flowering in the following July. The rosy-flowered Andromeda polifolia is well worth cultivating, and anyone who has seen Pieris floribunda and P. japonica at their best will readily include them among the most useful of spring-flowering shrubs. Kalmias, Ledums, and Zenobias should be well represented in every good garden. Some of the Magnolias require protection from north and east winds or their flowers will be spoilt in spring. M. conspicua, M. Lennei, and M. Soulangeana are invaluable, bearing their sweetly-scented, white or purplish blossoms in April. These make grand specimen plants for the lawn; they require a rich loamy soil. M. stellata and M. Watsoni are good low-growing species which flower freely when quite small. The latter is sometimes grown for M. parviflora.

Daphnes are specially noteworthy, the following being some of the best:—D. Mezereum and its several varieties, D. Cneorum, D. Blagayanum, a delightful little sub-alpine, and even D. indica may be planted in a sheltered corner. The two last-named require special care and attention, but they are worth it. Skimmia Fortunei produces a profusion of small white flowers in spring, succeeded by a prolific crop of bright red berries.

Fothergillia alnifolia, a N.-American plant of sturdy constitution, bears sweet-smelling white flowers in great abundance in April. *Chionanthus* virginica, the Fringe-tree, is a delightful plant, developing its drooping racemes of white fragrant flowers in May. *C. retusa*, a Chinese species, which flowers later, also is a good shrub.

Turning now to the loamy portion of our border we may note such things as *Exochorda grandiflora* and *E. Albertii*, both good and pure white-flowered, the Ceanothuses of various habit and shades of blue; *Kerria japonica*, both the single and double flowered forms, most useful yellow-flowered bushes; the Weigelas, of which there are now many fine seedling forms and varieties; *Staphylea colchica*, one of the most useful of white-flowered shrubs; a hybrid called *S. Columbieri* promises to be equally good. Spiræas, Wistarias, Clematis, Viburnums, and Witch hazels are too well known to require more than passing mention. One of the last named, viz. *Hamamelis arborea*, is a glorious little tree, its long branches bearing in January crowds of bright golden yellow flowers.

In conclusion I may mention a few choice plants for massing in beds or groups in conspicuous places:—Daphne Mezereum, Prunus sinensis fl. pl., Prunus Pissardii, Amygdalus nana, Amelanchier canadensis, Berberis stenophylla, Forsythia suspensa, Escallonia Phillipiana, Genista radiata, G. virgata, G. præcox, Cytisus albus, C. scoparius and vars., Azalea amæna, Magnolia stellata, Hedysarum multijugum, a beautiful little purple-rose flowered shrub which is in flower from May to August, Robinia hispida, the Rose Acacia, Viburnum plicatum, Pyrus floribunda, double-flowering peaches, and, in a sheltered position, Pæonia Moutan.

KEW BRITISH BOTANY CLUB.

THIS Club was formed in 1892 with a view of encouraging the gardeners employed at Kew to take an interest in the work of collecting, drying, and critically examining plants intended for herbaria. The Assistant-Director, Mr. Morris, interested himself in its formation, offering prizes for the best collections.

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The Club has proved such a success that the Director has decided to put it on the same footing as the Lectures, and to award certificates under the following conditions :—

- 1. The specimens, which must consist only of wild British flowering plants and the higher cryptogams, must be collected between the middle of April and end of September.
- 2. Each specimen should bear the date of collection and the locality, and be properly named. Assistance may be sought in naming the plants.
- 3. The specimens may be presented mounted or unmounted. Plants of each Natural Order should be arranged together in separate covers.
- 4. Small plants should be dried entire. Large things may be broken and selected. Where root-leaves differ from stem-leaves the former should also be presented.
- 5. A specimen to be complete should be presented in flower and in fruit. Dissections of parts will add to the value of the specimens, but they will not be considered essential.
- 6. In awarding certificates the number of satisfactory specimens will be first considered; next the number of specimens requiring special care in drying; then the accuracy of the naming and the character of the whole as a botanical collection for scientific purposes. No cultivated plants will be admissible. The collections must be sent in not later than the 15th October.

THE CRICKET CLUB.

THOUGH scarcely so successful as in 1892, our Cricket Club has no reason to be dissatisfied with the record of the past year. In addition to the usual scratch games, six matches with local clubs were played. Of these three were won, two lost, and one drawn. Of the two afternoon matches with Kew Village, one was drawn and the other lost, results due in a great measure to our weakness in bowling. Throughout the whole season we were greatly handicapped by the want of proper ground for practice. The Green—never a perfect pitch—gets rougher and more uneven every year, and in the hot and dry weather of last summer correct cricket was quite out of the question, a fact which was soon painfully impressed upon our batsmen. Most of them rose to the occasion, however, and developed a tendency to defend themselves rather than their wickets, and the additional spice of danger did not seem in any way to affect the popularity of the game. In spite of many drawbacks the Cricket Club maintains its usefulness, and helps in no small

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degree to maintain feelings of good fellowship and that buoyancy of spirits which have a good effect on the work of the Gardens as well as on the game.

Officers, 1893.

Captain Mr. W. N. WINN. Vice-Captain..... Mr. J. AIKMAN. Secretary Mr. W. DALLIMORE. Treasurer Mr. J. R. WARD.

Committee.

Messrs. W. WATSON, H. J. DAVIES, and J. NEWSHAM.

The total number of members was forty-three, most of whom either played or practised. The entrance fee is one shilling and the annual subscription half-a-crown. The total receipts last year were $\pounds 6$ 8s. 10d., and the expenses amounted to $\pounds 6$ 2s. 9d.

REMINISCENCES OF AN OLD KEWITE.

By J. W. THOMSON, Haywards Heath.

May 24th, 1893.

DEAR SIR,

I am in receipt of your letter of the 19th inst., and have much pleasure in complying with your kind invitation as far as my memory allows me after such an interval as 63 years—1830 being the year I left Kew to become head gardener to the Duke of Northumberland at Sion House.

I have outlived three Dukes of Northumberland, two Duchesses, and nine head gardeners who entered their service since my time, viz., four at Sion, three at Alnwick, one at Stanwick Hall, and one at Albury Park.

I will endeavour to visit Kew early next week—probably before Wednesday. You would confer a great favour if you crossed the river to pay my respects to Mr. Wythes, asking him if he will be at home, as I should like to visit Sion and thus "kill two birds with one stone."

I am, dear Sir,

Mr. Watson.

Yours very truly, J. W. THOMSON.

THOUGH some of the incidents mentioned here happened 75 years ago, they are still fresh in my memory, my experience with regard to youthful impressions bearing out that of most men. Being now the only man living that was connected with the Royal Gardens in the reign of George III., having entered the Royal Lodge, Windsor, in the year degree to maintain feelings of good fellowship and that buoyancy of spirits which have a good effect on the work of the Gardens as well as on the game.

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Captain Mr. W. N. WINN. Vice-Captain..... Mr. J. AIKMAN. Secretary Mr. W. DALLIMORE. Treasurer Mr. J. R. WARD.

Committee.

Messrs. W. WATSON, H. J. DAVIES, and J. NEWSHAM.

The total number of members was forty-three, most of whom either played or practised. The entrance fee is one shilling and the annual subscription half-a-crown. The total receipts last year were $\pounds 6$ 8s. 10d., and the expenses amounted to $\pounds 6$ 2s. 9d.

REMINISCENCES OF AN OLD KEWITE.

By J. W. THOMSON, Haywards Heath.

May 24th, 1893.

DEAR SIR,

I am in receipt of your letter of the 19th inst., and have much pleasure in complying with your kind invitation as far as my memory allows me after such an interval as 63 years—1830 being the year I left Kew to become head gardener to the Duke of Northumberland at Sion House.

I have outlived three Dukes of Northumberland, two Duchesses, and nine head gardeners who entered their service since my time, viz., four at Sion, three at Alnwick, one at Stanwick Hall, and one at Albury Park.

I will endeavour to visit Kew early next week—probably before Wednesday. You would confer a great favour if you crossed the river to pay my respects to Mr. Wythes, asking him if he will be at home, as I should like to visit Sion and thus "kill two birds with one stone."

I am, dear Sir,

Mr. Watson.

Yours very truly, J. W. THOMSON.

THOUGH some of the incidents mentioned here happened 75 years ago, they are still fresh in my memory, my experience with regard to youthful impressions bearing out that of most men. Being now the only man living that was connected with the Royal Gardens in the reign of George III., having entered the Royal Lodge, Windsor, in the year 1819, I give these recollections of my early life in the hope that they may be of interest to Kewites of the present generation.

I attended Shrewsbury Grammar School when Dr. Butler was headmaster, having as fellow-pupils the late Charles Darwin and Lord Godolphin.

In November 1819 I left Shrewsbury for London on the 'Little Wonder' coach, which took a day and a half to accomplish the journey. I went to Kew and applied to Mr. Aiton, then Director of the Royal Gardens, as other young men did, and a month later he sent me to the Royal Lodge, Windsor, as an improver.

The whole of the Royal Gardens were then under one central authority, who directed not only Kew Gardens, but also the Royal Lodge, Cumberland Lodge, Buckingham Palace Gardens, and Hampton Court. Mr. Mitchell, who was chief at the Royal Lodge, gave me my earliest training in horticulture, and I have every reason to congratulate myself on having had such a master. Though firm in discipline, he was always ready to help those under him. From the acquaintance thus begun there grew up between us a strong friendship, which lasted until his death.

Some time after my arrival great improvements were commenced at Windsor, among which were the formation of new walks and drives in the Great Park, the beautifying of Virginia Water, together with the construction of the Fishing Temple on the island and of the renowned ruins. Frequently a hundred men or more were employed on these works, and I well remember the difficulties we were under with regard to food and housing. There were no lodgings to be had within about two miles from our work, so we all had to bring with us our ' nosebags,' as we called them, containing the day's rations. When at work in the woods, one man was allowed half an hour off before meal-times to make a fire of brushwood, over which a large kettle of water was hung, gipsy fashion, and we each put into it an equal portion of tea or coffee, as the case might be.

The pay of young gardeners, or improvers, in the Royal Gardens was then 12s. a week, with 2s. extra for Sunday duty—a wage that did not admit of riotous living.

I lodged at the Sandpits, Englefield Green, two miles from the Lodge, the late John Mann, afterwards manager of Hyde Park, St. James' Park, and Kensington Gardens, being my bedfellow. Our landlord, a butcher, knowing the hardships we endured, used to quiz us on our poverty, his common remark to his wife on Saturday evenings being :— "Now, dame, get a skewer and pick some fat from the cracks of the chopping-board and make a pudding for these poor, half-starved 12s.-aweek gardeners"!

Yet we were all light-hearted, merry fellows in those days, and many able men who afterwards rose to eminence began life in this humble way. Allan Cunningham, J. Mitchell, Richard Forrest, John Gould (the ornithologist), and John Jones were all at one time gardeners at Kew. Sir Joseph Paxton worked up to 1827 in the Royal Horticultural Society's

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Gardens at Chiswick, where the men were paid 14s. a week—a sum that caused them to be quite envied by the men in the Royal Gardens. Joseph Knight, formerly proprietor of the Royal Exotic Nursery at Chelsea, now belonging to Messrs. J. Veitch and Sons, worked in Messrs. Lee's Nursery at Hammersmith in 1799 for 10s. per week and a quartern loaf, then worth 1s, 10d.

My first stay at Windsor was but a short one, as in 1820 I was transferred to Kew Gardens. Almost the first work I did there will appear curious now. So little was known at that time of the nature of the *Araucaria imbricata*, now quite common in England, that it was thought necessary each winter to protect it by erecting scaffolding and matting, entirely enclosing the tree, then about twenty feet high, and I well recollect assisting at this work the first October I was at Kew. This tree afterwards showed its power to resist extreme cold by surviving the great frost of January 19th, 1838, when over 40 degrees of frost were registered *.

Much excitement was caused the same year by a mysterious robbery of plants from the Botany Bay house, a large lean-to structure, so called from its containing the collection made by Sir Joseph Banks during his voyage with Captain Cook to Australia. Among the stolen plants were many rare specimens, supposed to be the only examples in the country at that time, including *Banksia grandis*, *Metrosideros*, and *Dryandra*.

In consequence of this the gardeners, numbering about twenty, including myself, were kept in close confinement for four or five days in a shed on the opposite side of the supporting wall of the Botany Bay house. We had to make the best of our close quarters; feather-beds and ottomans were not provided, but being all sturdy fellows with plenty of animal spirits and having as much food as we wanted, we got on very well with wooden benches and mats. This affair was never satisfactorily cleared up. The keeper of the toll-gate on Kew Bridge swore to having seen Michael Hogan give a box to the coach to be delivered in the name of Sweet at Mr. Colville's Nursery, King's Road, Chelsea. Mr. Sweet, the botanist, was charged with having been the prime mover in the robbery, but the case fell through as the plants could not be identified, Mr. Loddiges, nurseryman of Hackney, stating in evidence that he had seen other examples of them in other gardens. Hogan, who was one of the gardeners locked up in the shed, disappeared and, I believe, was never heard of afterwards.

In 1822 or 1823 I was again sent to Windsor, where it was my duty to attend to the temperature of the great conservatory during the performances of the private band of King George IV. under the direction of Cramer.

Every Sunday I had to make up bouquets of Camellias and other flowers for the pews in the Royal Chapel. The Neapolitan violet was at that time an especial favourite at Court.

While at work on the improvements at Virginia Water previously referred to, I had a *contretemps* with King George which, getting into the papers of the time, gained for me the cognomen of "the King's

* [This tree was cut down in 1892. See note in first number of Journal, p. 11.-ED.]

fool." I was superintending the making of a branch road leading to the Fishing Temple from the main drive from the Royal Lodge. The new road was staked out, but the King did not approve of the curve and told me to alter it. Being rather nervous in the presence of His Majesty, I did not move the stakes at all to his liking. Mr. Mitchell being close at hand, I suggested that I should call him. The King replied tartly, "Yes, you d-fool, do!" I hastened to do this, and got away in among the shrubs as quickly as possible. About the year 1824 I was sent to Cumberland Lodge to take charge of the Orangetrees presented to George IV. by King Louis of France, which now form the famous collection at Windsor Castle, having been removed to the conservatories there after the restoration. I was at Cumberland Lodge when King George was presented with a Giraffe, then a curiosity in England, and the animal with its attendants was put up in the coachhouse. It fell to me to give it its first meal, which consisted of the leaves of the common ash.

When the Duke of Buckingham, in 1826 or 1827, sold his splendid collection of American plants at Whiteknights, near Reading, Mr. Aiton deputed me to attend the sale, make a selection and superintend the removal of the plants, which were conveyed in waggons to Windsor, and afterwards planted in the grounds of the Castle when it was remodelled. Whilst there I made the acquaintance of Mr. Jones, an old Kew man, then head gardener at Whiteknights.

In 1827 Mr. Aiton drafted me to Kew once more.

James Drewitt, formerly head gardener to Mr. Thos. Cubitt of Denbies, was early associated with me, both at the Royal Lodge and at Kew. He was much smitten at this time by the charms of a Mrs. B., head nurse to the children of Lord Mountcharles, who then rented the Earl of Dudley's house in Park Lane, and often on Sundays did we walk together from Kew to Park Lane to pay our respects to her, leaving in the evening with perhaps a plum-pudding, a pot of chicken broth, or some other dainty to supplement our meagre fare. The coach-fare between Park Lane and Kew Bridge was then 2s. 6d., a sum that our slender means could not often furnish. On one of these visits it turned out a very wet night and, our pockets being empty, it appeared like trudging back; but Mrs. B. came to our rescue, paying our fares and giving us a fine, large plum-pudding to console us, which, alas! we left in the coach at our journey's end!

It was a rule at Kew, enforced by the penalty of dismissal, that no gardener should take tips from visitors; but I know this rule was often broken when a tempting *douceur* was offered. "Old Jock Smith" was an uncompromising stickler for the rules, which accounted, perhaps, for his unpopularity.

Dr. Pollock of Harley Street, a well-known botanist, often visited the gardens, and invariably enquired for me to show him round. This preference of the doctor irritated "Old Jock," who, though clever, was narrow-minded, and he went so far one day as to question me about it. Being aware of this, the doctor, as he was leaving, made a practice of going to the large vase near the Temple of the Sun, often out of his way, where he scratched the soil and placed a coin in it, saying "Thomson, I will plant this here, and see if it has germinated the next time I come." Naturally, my botanical knowledge told me that the soil was quite unsuited for such "plants," and it was not long before I transferred them to my pocket, where they germinated more to my satisfaction.

It is only fitting that I should pay a slight tribute to the memory of Mr. Aiton, to whom I owe so much for my success in life. He quickly appreciated the merits of any promising young man, giving him every encouragement by placing him in a position where enlarged knowledge could be obtained. He often addressed me familiarly as "my boy John," and always showed me the greatest kindness, entrusting me with commissions of which I was very proud. The first holiday I ever had was granted me by him. I had been from home about five years, when I asked for leave to visit my parents at Shrewsbury. "What," he said in his bluff way, "are you mammy sick?" However, he gave me a fortnight's leave.

It was in Aiton's time that the celebrated Vine at Cumberland Lodge was planted by Mr. Tidy, about the year 1815, in a small house about twenty feet long by ten feet wide, having a pit for pine-culture, which was filled up with mould to receive the young plant. James Drewitt and I often were employed on this vine.

I left Kew in 1830 to become head gardener at Sion House, then, as now, the residence of the Duke of Northumberland. At that period the Queen, then the Princess Victoria, together with the Duchess of Kent, her mother, was a constant visitor, the Duchess of Northumberland being her preceptress; and it was my duty to be in attendance to cut the flowers chosen for bouquets. Every morning I prepared a bouquet of the choicest flowers for the Duchess, who used to leave at about ten o'clock for Buckingham Palace, where the Princess and her mother resided.

In the extensive conservatories of Sion House there were many rare plants, and occasionally I was gratified by being the first to flower or seed a plant in England.

I well remember that the first flower of Vanda teres that opened was cut by the Duchess's orders and taken to the Princess. In 1834 Mr. Lambert sent from China to Sion House some seeds of the Cedrus Deodara, now quite plentiful in English gardens, and I raised from them what I believe to have been the first trees ever grown in this country *.

* [According to J. Smith in his 'Records of the Royal Botanic Gardens,' *Cedrus Deodara* " is recorded in some books to have been introduced in 1822, and as regards seeds such may have been the case, but on account of the long voyages and manner of packing none appear to have vegetated; the first that did so were brought home by the Hon. Leslie Melville, in the year 1831, who on visiting the Gardens gave me a few seeds which he had loose in his pocket, one of which vegetated, and this after several years' nursing was planted in the old Arboretum (near No. 2), where it still stands."—En.]

I will close this short sketch of my early life by saying that I left Sion House in 1835 to commence business as a nurseryman, establishing the Exotic Nursery at Hammersmith with about an acre of glass erections. The nursery has long since disappeared, having been sold by me in 1860, and the land built upon.

In 1815 I took the prize for drawing at Shrewsbury Grammar School and in after-life pursued the art in designing horticultural erections. I send you some of my designs, and beg of you to accept them as a memento of an old Kew gardener now ninety years of age. They are all original designs—I never copied. Four of these are of buildings that I erected in Ireland, and many of the others were carried into execution in various parts of England, Scotland, and Wales.

I also send you a list of celebrated head gardeners and others whom I know were either Kewites or connected with the different departments of the Royal Gardens, viz., the Royal Lodge, Cumberland Lodge, Hampton Court, etc.

These particulars, though necessarily incomplete, are to the best of my belief accurate, and I trust they will be found of interest to members of the Kew Guild.

List of old Kew and Royal Garden Men.

John Mitchell, head gardener, Windsor Castle.

- Toward, head gardener, Osborne, Isle of Wight.
- Wayman, head gardener to Lord Portman at Blandford, 1829.
- George Bond, head gardener to Earl of Powyss at Walcot, Shropshire, 1827.
- Wm. Law, head gardener to Earl of Carlisle, Castle Howard, Malton, Yorks., 1828.

John Steward, head gardener.

John Drewitt, head gardener to Mr. Thos. Cubitt, "Denbies," Dorking.

Richard Cunningham Allan Cunningham } Afterwards botanical collectors for Kew.

Wm. Ingram, head gardener, Frogmoor.

- Bradnoor, head gardener, Bagshot Park.

James Wood, head gardener, Hampton Court Palace.

- Morrison, head gardener and collector, Trinidad.

- Plimley, foreman, Kensington forcing gardens.

John Gould, foreman, "Slopes," Windsor.

James Burtie, head gardener to Lord Palmerston.

- MacNab, Curator of Edinburgh Botanic Gardens.

John Darling, steward and head gardener to Mr. Compton, New Forest, 1828.

William Gore, head gardener to Sir William Harcourt, 1826.

James Drewitt, head gardener to Sir William Stanley of Chester. John Macfarlane, head gardener, Royal Lodge, Windsor Park.

- John Jones, head gardener to the Duke of Buckingham, Whiteknights, near Reading.
- Richard Forrest, head gardener to Earl of Grosvenor, Eaton Hall, Cheshire.
- Bryant, foreman, forcing houses, Cumberland Lodge, Windsor.

- Rigby, foreman, Botanic Gardens, Kew.

- John Smith, who was known as "Old Jock," foreman, Botanic Gardens, Kew.
- John Gould, the great ornithologist, who worked with me in his early life for several years in the Botanic Gardens, Kew.
- Tidy, foreman of the forcing houses at Cumberland Lodge. He raised the great vine there.

J. Bowie, botanical collector at the Cape, for Kew.

John Vere, Nurseryman, Windsor.

Fellow workmen at Kew between the years 1819–1830:—Thos. Osborne, Alexander Gaw, Wm. Gaw, John Choles, George Henderson, John Noland, James Aldridge, Arnold Aldridge, Wm. Holmes, and Charles Norris.

KEW, AS I KNEW IT, NEARLY FIFTY YEARS AGO.

By THOMAS MEEHAN, Botanist to the Board of Agriculture, Philadelphia, U.S.A.

As a boy, botany and gardening had equal charms for me. When only fifteen years old I raised the first hybrid Fuchsia St. Clare; and, as a reward for a paper published on Rubus, I was elected, before I was 19 years old, a member of the Royal Wernerian Society.

Kew had recently been reorganized and Sir William Hooker had been placed in charge. I had been reading about it, and through the good offices of Dr. Bromfield and Dr. Salter I got the promise of work there. I started for London in April 1846, but I cannot remember how I got there; whether I went by rail or Pickford's van is an utter blank. I can only recollect that I sat on my trunk in Regent's Circus (I think the locality was called) for an hour waiting for a Kew omnibus to come by. In the midst of thousands, I never felt so lonely. I felt as if my heart would break. At length a Kew vehicle came, and I remember landing at the Richmond Gate, as it was then called.

I lodged for a time in a house near the Thames, on Kew Green, my fellow-lodger being Frederick Robins. Afterwards I lived opposite Richmond Gate, my room mate being Berthold Seemann, and in the next house lived Louis Neumann, still, I believe, alive in Paris. On the other side was William McIver, who shortly afterwards went to Madras, and William Stevens, who finally became an assistant in Sir William Hooker's Herbarium. In the same row were Louis Rauch, F. Strauss, and Fred. Fiedler, three Germans, and the brilliant R. Robinson Scott.

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I lodged for a time in a house near the Thames, on Kew Green, my fellow-lodger being Frederick Robins. Afterwards I lived opposite Richmond Gate, my room mate being Berthold Seemann, and in the next house lived Louis Neumann, still, I believe, alive in Paris. On the other side was William McIver, who shortly afterwards went to Madras, and William Stevens, who finally became an assistant in Sir William Hooker's Herbarium. In the same row were Louis Rauch, F. Strauss, and Fred. Fiedler, three Germans, and the brilliant R. Robinson Scott. James Niven, a quiet sort of body, but full of knowledge of almost everything, was in the Herbaceous Ground when I left; he subsequently took charge of a Botanic Garden at Hull.

We were nearly all inveterate collectors of wild flowers, making herbaria of our collections. It was no uncommon thing for us to start away a little after six on Saturday, and make fifty miles before Monday morning-Box Hill and Reigate for their orchids being our favourite objective points, in one direction, and Gravesend, Tunbridge Wells, and other places in another. McIver, a model of physical strength, used often to take long journeys alone, some of us paying a share of his travelling expenses and afterwards sharing the specimens he gathered. In the grounds, Walter Hill was foreman of the Propagating House; John Houlston of the Orchids and Ferns; A. Williamson of the Herbaceous Plants; and "Jimmy" Aldridge, the practical man to look after the potting of the plants. P. Nolan had the Pleasure Ground, which at that time, however, was not regarded as a part of Kew Gardens. As I remember it, the whole garden could not have occupied more than twenty acres. A large portion on one side was occupied by the Duke of Cambridge and his family, while on the other side was a large tract with the Palace in the centre.

My first assignment was in the "Orangery."* It was a huge building with, I believe, an opaque roof, with light only from the sides. It was chock full of Mexican trees and shrubs, Pines, Oaks, and other things, collections of Skinner and, I believe, Liebmann. I soon knew them all, fortifying my memory by specimens of the leaves, which I still keep among my treasures. I was afterwards translated to a house called the Old Stove, not far from what was a small aquarium. This had Epacris, Crowea, and similar plants, but it must have been a sort of mixture, as I remember *Antiaris toxicaria* was one of my best lecture plants.

At that time we had only to watch visitors in the afternoon and give them information. I loved to hunt up all about my plants and air my new-found knowledge to the people who came there. I regard it as among the most useful experiences of my early life. For twenty years I gave monthly "talks" at a Horticultural Society's meetings, on the plants, fruits, and flowers on exhibition; and I trace the ability to my early experience at Kew in "lecturing" to the visitors in this house.

Among the most frequent, and to me most welcome, visitors was the Princess Mary, then a rollicking good-natured girl of fourteen, to whom the spirit of mischievous fun came as a second nature. Her father, the Duke of Cambridge, who was a general favourite with the men, usually took a daily walk through the Gardens. He had a faculty of recognizing at once a new-comer, and always asked his history, whence he came, and who were his friends. If they could say, "From Sharemany, Your Royal Highness," as the words now ring in my ears from one of my companions, they were generally in for a prolonged chat with the dear old man. The horse-chestnut raised from a nut, and then a year old,

* [Now No. 3 Museum (Timbers).—ED.]

which the Princess Mary or Prince George planted, was always wellcared for. It must be a large tree now.

While in the Old Stove the Australian House (now the Conservatory, No. 4) was finished, and I was moved there. The Hakeas, Grevilleas, Acacias, and other Australian plants delighted me. I have never forgotten, and have steadily kept it in view, to have one like it in my adopted city of Philadelphia. The chance came last year, and I succeeded in getting my fellow-Councilmen to vote \$10,000 to begin the work.

While in this house I managed to offend the Director, Sir William Hooker. I was, for punishment, sent to work in the Cactus House. which no one cared for; but I early acquired a liking for it. A huge Echinocactus Visnaga, weighing over a ton, large enough for a watch-box. was in the collection at that time. I soon had cards on my plants of the Cochineal, Turk's-head, Barbados Gooseberry, Old Man, and other Cactuses, and found plenty to talk about, my house becoming as popular with the inquisitive visitor as anybody's. When I flowered for the first time under cultivation in America Cereus tuberosus, it led to my acquaintance with one of the most charming men in America, my lifelong friend, Dr. George Engelmann; and I have long since forgiven Sir William for the lucky "punishment" he sentenced me to that day. There is a beautiful pass in the Rocky Mountains named "Engelmann Cañon." Many have wondered what connection he had with it. I was the first white man who ever saw and explored it. As its discoverer I was asked by the Surveyors to name it, which I did in compliment to my Cactus-friend. Strange, isn't it, that my banishment to a hated greenhouse should have resulted in giving a great name for ever to a mountainpass !

After serving at Kew two years and one month I determined to start for America. I applied to Mr. Robert Buish, of Philadelphia, who offered to take me as a labourer in his Nursery at \$10 (£2) a month and my board; and with four sovereigns in my pocket I found myself on the Atlantic Ocean in February following.

Going back now to Kew, some fuller notes may be given of my companions there. James Aldridge, familiarly "Old Jimmy," must have already been there for years. In all my experience I never met a better practical plant-grower. His manners were "child-like and bland"; very little pleased him, provided we were industrious. John Houlston, another foreman, we regarded as a prodigy among orchids and ferns, especially the latter; and when the trick of a youngster who handed him, as a trap, a small pinnule of a Jacaranda as a fern for a name, was met with "Eh, mon! it's nae fern," we could not understand, till we studied the venation, how he could be so wise. He seemed to live for ferns, working among them all day and drawing them at night. Walter Hill, who had charge of the propagating house, we always felt had a tender place in his heart for the animal world. He went to Brisbane, in Australia, and he will still tell you stories of the wonderful doings of his favourite hunting-dogs. Nolan had the Pleasure Ground, but that was not then really a part of Kew Gardens. He was a very good man, although it was mainly owing to his interference that I came to America.

Berthold Seemann was my ideal: tall, handsome, broad-shouldered, and strong, he yet was as gentle as a woman. It occurred to me to try for the appointment as successor to young Edmonstone, who died on the voyage of the 'Herald,' and I found that' Seemann was in the same boat. I knew how immeasurably superior he was to me, and I was honestly gratified when he told me of his success. I have never seen it noted in accounts of Seemann that he had poetical abilities. He had, however; and it is strange that none of his poetry has ever been published.

A remarkable young man was John Murray. He had a superior knowledge of plants and gardening; but few knew it, for though he had a genial pleasant smile and "Good morning" for all, he seemed a sort of gentleman, aloof from all his fellows. On closer acquaintance I found he believed he had a "mission" to help mankind. He talked of going to America some day—an idea I opposed; I contended that England was the best school for reform in the world. He left for America before I had been three months at Kew, and finally became a prominent Unitarian clergyman. He may still be living, though it is some years since I heard of him.

One of the brightest and best of my early Kew acquaintances was James Littlejohn. Beyond that he was a Scotsman, and had worked at Orleans House, Twickenham, I know nothing of his personal history. His knowledge of history and *belles-lettres* was remarkable, and he was saturated with science of all kinds. Under his practical advice we clubbed together once in a while and sent to Scotland for Scotch oatmeal by the hundredweight. He taught us to make "parritch;" and it was with money in my pocket saved by this economy that I marched off to London one day, to Bradbury & Evans', to buy a copy of Lindley's 'Vegetable Kingdom.' He disappeared from Kew, I never knew when nor where. A few months ago, however, I accidentally heard of one of the name who died in a town not a hundred miles from me. Writing to enquire, I found that it was the same as the bright young fellow I had learned to love so well.

R. Robinson Scott came to Kew when I had been there about a year. He was from the Belfast Botanic Garden, and was a *protégé* of Mr. Ferguson. He was thoroughly at home in Greek and Latin, and was equally well acquainted with modern languages. French and German were as easy to him as his mother tongue. With him I went carefully through Lindley's 'Vegetable Kingdom,' and felt we were fair botanists in the end. He became morbid on the "wrongs of Ireland," and gave some of the most eloquent orations in some London halls I ever listened to. One of these addresses was published, and I still have a copy of it. It is entitled "What has Dissension done for Ireland?" and in eloquent pathos will bear comparison with some of the most brilliant efforts of famous men. He left Kew, under great excitement, to aid Thomas Francis Meagher and Smith O'Brien in their work. Subsequently he came to Philadelphia and without a dollar of capital started the 'Philadelphia Florist,' which came very near being a permanent success, and though it ceased after two or three years it showed what could be done, and paved the way for more permanent works. It was evident that his mind was giving way at this time, and he died a few years after in the State Hospital. His brief career in Philadelphia did much to elevate and dignify horticulture and botany in America; and all Kewites may hold the memory of this young man—small in stature, but great in mind—in grateful remembrance. I should like to tell of Strauss, Fiedler, Robins, William Walden, Whitaker, Sholes, James Banim, Rauch, and many others who went and came while I was there—some who deserved fame and reputation which fate denied them, and of some who did become famous; but I fear this sketch is already too long.

I will finish the chapter by relating how I first offended Sir William Hooker. It was on the occasion of a visit of the Queen to Kew. A very fine bunch of bananas had been cut that morning, and Sir William thought to present it to her. I was working near, in my shirt-sleeves, when he asked me to go as hastily as possible and get the bunch before the Queen left. Without waiting to get my coat, I tore away and came up with the bananas near the entrance gate. It was a very heavy bunch; I held the bunch in one hand and my hat in the other, while Sir William explained to Her Majesty facts in its history. I found it impossible to keep it up with one hand, so put my hat on my head and used both. Subsequently Sir William sent for me, and asked how I dared to appear before Her Majesty without my coat and to wear my hat in her presence. Naturally he was mortified that any of the Kew gardeners should seem rude and wanting in respect to Royalty. To many it would seem a trifle; but our whole life is made up of trifles. Sir William was right, though 1 did not think so then.

But the worst blow came from the gardeners plucking specimens for herbarium purposes. There was no question but that the plants were broken to a scandalous extent. The greatest sinners were among those who cared little for study. The better class of boys, if they took any specimens at all, were satisfied with a leaf or two, with a very small sprig. But one morning some plant had suffered to such an extent that the Director determined something should be done to stop the practice. We were all called together, and formed a large circle near where a specimen of Araucaria imbricata grew; and the Director and Curator stood in the centre of the circle. Sir William then put the question to each, "Did you ever take any specimens?" "No, Sir William," was the answer. "Do you know of any one who did take them ?" "No, Sir William." And so it went round, till it came to my turn. My answer was, "No, Sir William, except with permission from a foreman in each case." "Do you know anyone who did?" "Yes, nearly all have taken them." When asked to name them, I replied that I could not give their names. The final dictum was that if I did not give the names of the guilty ones I should be dismissed. When Saturday night came I was still stubborn, and so was informed that on account of the friendship of Sir William for Dr. Salter and Dr. Bromfield, he would not discharge me, but I was to leave of my own accord. When my two years had expired, I was promptly reminded thereof. I had some difficulty in obtaining a certificate, and when I did get one it briefly stated that I had worked at Kew two years and one month, "during which time he has obtained a good knowledge of plants."

As I look back over the affair now I can see how righteous was the indignation of the Director against those who had so scandalously mutilated the plants.

Through a friend of my father, the Countess of Clare, I was engaged by the Earl of Shrewsbury to be gardener at Alton Towers, but lost the appointment because my religious faith was not considered to be of the right kind. Smarting under this disappointment, I then resolved to go to America, a country, as I then believed, where a man's theological opinions would not stand in the way of professional advancement, and thus it was that I ultimately found my way to the New World.

It is a strange commentary on the last paragraph that I had not been on American soil twenty-four hours before I met two friends one who entered Kew just before I left it, the other from Knight and Perry's of Chelsea (now Veitch's)—who saddened me with their story of the religious trials they had experienced in the New World. But this is another matter.

My life has since been one of the average lives of humanity. I have had my sorrows and my sufferings, sometimes I have thought more than my full share. But then, the pleasures ! I believe I would be perfectly willing to take it all over again, just as it has been; and of all life's pleasures I think most have been derived, directly or indirectly, from my sojourn at Kew.

GARDENERS' PROSPECTS IN THE UNITED STATES.

By ROBERT CAMERON, Curator of the Botanic Garden, Harvard University, Cambridge, Mass., U.S.A.

I LEFT the Royal Gardens, Kew, in April 1887, to try my luck in the United States. I had no friends in America, and I remember well the difficulty I had in obtaining information about gardening in that country. When I told my foreman that I was going to America on speculation, he said "There is not much chance for a gardener there; if you want to succeed go to Australia." I am glad I did not take his advice, because, from what I have learned since, America is a better country than Australia for gardeners.

I was recommended to go to the Harvard Botanic Garden and see

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Mr. Falconer, an Old Kewite. But when I called I found that he had left that place three or four years previous. From this single instance it will be seen how little was known, even at Kew, about the movements of Old Kewites. Thanks to the Journal of the Kew Guild, we shall in future know all about Old Kewites and be able to turn them to account as well as correspond with them.

Every year since I came out here several young gardeners from Kew have written to me, seeking for knowledge about gardening in this country, and the best time to come here. The idea occurred to me that a few hints in regard to such matters would be interesting to Kewites who may contemplate coming out West.

Of late years horticulture has made great progress here. According to the Census returns, in 1891 there were 4,659 florist establishments in the United States, giving employment to 16,847 men and 1,958 women. There are 1,323 Florist Societies, Clubs, and Horticultural Societies in the various States and Territories of the Union. No doubt there has been a very large increase in the above figures since this return was made.

Another proof of the progress in horticulture here is seen in the large number of greenhouses that have been built. A most reliable horticultural builder has said that, within the last thirty years, 6,000 commercial greenhouse establishments have been started, and that probably there are ten times that number of private places where glass-houses have been erected. The total value of these is estimated at 225,000,000 dollars.

We have three Botanic Gardens, viz., the Government Botanic Garden at Washington, the Shaw Botanic Garden at St. Louis, and the Harvard University Botanic Garden at Cambridge. A fourth is likely to be soon added in New York City. This would have been begun some time ago, but the money required for it, 1,125,000 dollars, has not yet been secured. Several of the Colleges also are making preparations to form Botanic Gardens.

Large private gardens are not so numerous as in England; still there are some very creditable places where there are large, well-kept collections of plants, both under glass and out of doors. Large nurseries, where foreign and native trees and shrubs are grown on an extensive scale, are numerous, and there are evidences that hardy herbaceous plants are becoming popular here. Extensive florists' nurseries, where Roses, Carnations, Violets, Chrysanthemums, etc. are grown for their flowers, are very numerous indeed. In some of these twenty or thirty large greenhouses are devoted to one sort of plant. Nearly every city, however small, has its park or parks, some of them being very fine, large sums of money being spent annually upon them.

I have known men who have come to this country at the very worst time of the year to get situations, and who, after waiting around for a few weeks for a situation, have become disgusted and have written home to England that gardening in America is not so good as it was represented to be. Anyone coming here at the beginning of winter has a very poor chance of a good situation till spring. The most favourable season to arrive here is from the middle of March to the end of May, as there are more changes made then than at any other time. On arriving here application should be made to any reliable seedsman, whose name may be found in any of the American periodicals or directories. If they have not a suitable situation on their books at the time they can, and will, give good advice as to the best way to get employment, as they are all good fellows, always willing to help young gardeners. There are also many Old Kewites in this country who would, I am sure, be glad to give any information that would be of value to a fellow Kewite.

The kind of men who are specially wanted in this country are those who are not afraid to work. It is useless for a man to make up his mind to accept only a certain kind of employment; if he does, he will run the risk of waiting a long time. If he be wise he will take the first chance of any reasonable position that comes up, and then he can be always on the look-out for something better. At the same time, although he may not be earning much, he will be gaining experience. Many things are done very differently from the English methods. A man requires at least two years' experience here before he can fill a head position satisfactorily. The climate and other conditions are so different that it takes some time to get used to them.

The wages of head gardeners in the Eastern States vary from sixtyfive dollars to one hundred dollars a month with house and other perquisites. Journeymen gardeners get from forty-five to sixty dollars a month, but the wages vary considerably in the different States.

It will be seen from the list of Past Kewites in the Journal of the Kew Guild that there is a large number of Kew men in this country. Most of them are in good positions, some being Botanists, others Editors of Garden Periodicals, Nurserymen, or Curators of the Botanic Gardens. In fact all the Curators of the Botanic Gardens here are Kew men, and a large number are Head Gardeners and Foremen. All the Kew men I know here are doing very well, and I am pleased to be able to give a good report of them.

The Editor regrets that several interesting papers sent for publication in this Number have been crowded out.

PRESENT KEW STAFF.

Service	e.
Director W. T. Thiselton-Dyer, C.M.G., C.I.E., F.R.S., Ph.D., F.L.S. Assistant-Director Daniel Morris, C.M.G., M.A., F.L.S. Assistant (Office) John Aikman " "	*
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	
" " (Cryptogams) George Massee	*
Honorary Keeper, Jodrell Labora- Dukinfield Henry Scott, M.A., tory Ph.D., F.L.S	
Curator of MuseumsJohn Reader Jackson, A.L.S.1858Assistant (Museum)John Masters Hillier1879PreparerGeorge Badderly1880	
Curator of the Gardens	
Foremen:— Arboretum William J. Bean 1883 ³ Greenhouse and Ornamental	*
Department	
Department) Thomas Jones 1888* Herbaceous Department Walter Irving 1890* Storekeeper George Dear 1884 Packer William Crisp 1875	*
Clerk of the Works E. Chart 1888 Assistant ditto J. Allen	

* Entered as a young gardener.

SUB-FOREMEN.

		Entered Kew	
Name.	Department.	Service.	Previous Situation.
Browne, John M	Label Writer	Oct. 1891	Clonard, Dundrum, Dub- lin, S.
Dallimore, William	Arboretum	Feb. 1891	Calveley Hall, Tarporley.
French, Henry	Palm House	Apr. 1891	Danesfield, Marlow, Bucks.
French, William B.	Orchids	Sept. 1891	Pendell Court.
-	(Outside).		Pendell Court. Cannell & Sons, Swanley.
Miles, John W	Decorative Dept. (Inside).	July 1891	Sussex Horticultural Co.
,			Reid & Bornemann, Syden- ham.
Wakely, Charles	Propagating Pits.	Sept. 1890	The Ferns, Weybridge.

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GARDENERS.

Name.	Entered Kew Service.	Previous Situation.
Archer, Sydney	Apr. 1893	Shipley Hall, Derby.
Arnold, George	Oct. 1892	Cranbourne Court, Windsor Forest.
Avins, Christopher W.	July 1893	Carpenders, Watford.
Bass, Edward	Nov. 1888.	a lin Dial
Behnick, Eric	July 1893	Cambridge Bot. Gard.
Bliss, Daniel	Sept. 1892	Dalkeith Palace.
Burbridge, George	Aug. 1893	Ladd's Nurseries, Swanley.
Cambridge, Robert	Nov. 1892	Weston Birt, Tetbury.
Cave, George H	Jan. 1894	Studley Castle, Warwick.
Chapelow, Albert U	Apr. 1893.,	May's Nurseries, Edmonton.
Clark, John	Mar. 1894	Hillingdon Nurseries, Uxbridge.
Cooper, Edward	Jan. 1893	Pierrepont, Farnham.
Davidson, William	Mar. 1894	Merstham Nurseries, Surrey.
Galt, Alexander S	Jan. 1893	Stanwick Park, Darlington.
Green, James	Mar. 1893	Trelissick, Truro.
Gribble, John	July 1893	The Cliff, Penzance.
Hosking, Albert	Apr. 1893	Pinalvern, Penzance.
Howlett, Charles	Dec. 1892.	Wood Lane Nurseries, Isleworth.
Hutchins, Edward	Apr. 1890.	
Leigh, Ferdinand G. R.	Apr. 1893.	Jamaica Bot. Gard.
Lunt, William	May 1892.	Welbeck Abbey.
Mathews, Joseph W	Apr. 1893.	Manchester Bot. Gard.
McMillan, Hugh F	Aug.1893.	Cardiff Castle.
Moore, John C	Dec. 1893.	Broadlands, Romsey, Hants.
Morris, Richard	Apr. 1894	Easton Lodge, Monkstown, Dublin, S.
Negus, Edward E	Feb. 1893.	Pennell & Sons, Lincoln.
Pertwee, William W	Jan. 1894	Bull's Nurseries, Chelsea.
Rourke, James	Mar. 1894	Glasnevin Bot. Gard.
Scott, Frank	July 1893	Knightleys, Exeter.
Skan, Sydney A	Sept. 1892	Birmingham Bot. Gard.
Tribble, Frederick	Apr. 1894	Cardiff Castle.
Voegeli, Oscar E	Sept. 1893	Spath's Nursery, Bixdorf, Berlin.
Walters, William	Feb. 1894	Low's Nurseries, Clapton.
Wigman, Jan R.	Apr. 1894.	Wigman & Sons, Zutphen.
Young, Edwin C.	Oct. 1893.	Wyck Hill House, Stow-on-the-Wold.
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OLD KEWITES.

Name.	Left	Kew.	Present Position and Address *.
Aggett, William			Walpole Road, Teddington.
Aherne, Michael	Aug.	1866.	Contraction of the second
Aldridge, A	About	t 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.
Arksey, Thomas	Dec.	1870	Went to United States.
Armstrong, James	Mar.	1893.	
Armstrong, Thomas	Aug.	1850	N., Moorville, Carlisle.
Ashton, Frank	May	1885	Lewis & Co., Southgate.
			Sonthal Colony, Guma Duar, viá 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.