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

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

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

IN MEMORIAM.

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

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 By permission of the Director we are able to use and refer to unpublished documents preserved in the archives of the establishment.

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

JOHN SMITH, A.L.S. (Curator of the Botanic Garden, 1841-64.)

Son of a gardener, born at Aberdour, Fife, in 1798, and died at Kew in 1888, having long outlived his wife and numerous children, most of whom died young from consumption. He entered the propagating department at Kew, under Aiton, in 1822, and in 1823 was made foreman of the same. From about 1826 he was actually Curator of the Gardens, though not nominally such until 1841, when the management was vested in the Commissioners of H.M. Woods and Forests, and Sir William Hooker was appointed Director. John Smith was so intimately connected with the gardens, his knowledge of their history during a long, critical, and interesting period was so great, and his personality familiar to such a wide circle, that it is difficult to keep a notice of him within the prescribed Already in 1860 his eyesight was fast failing, yet he still limits. prosecuted his favourite study of ferns; and he continued his literary pursuits, with the aid of an amanuensis, up to within a year or two of his death. He was elected A.L.S. in 1837, and there is an abstract of his first paper on "Ergot" on the first page of the first volume of the 'Proceedings' of the Linnean Society. His publications more particularly relating to the establishment are: 'Cultivated Ferns,' 1857, and 'Records of Kew Gardens, 1880. The former is really an enumeration of the ferns cultivated at Kew at that date. It should be added that this was preceded by Smith's list of the ferns cultivated at Kew in 1846, published in the 'Botanical Magazine' of that date. This, we believe, is the first list of any group of plants grown at Kew since the appearance of the second edition of Aiton's 'Hortus Kewensis,' at the beginning of the century. The latter is a collection of facts connected with the Gardens, many of them of great interest. There are some palpable errors, due, doubtless, to his affliction. He also, unfortunately, made it the vehicle of some real or imaginary grievances. Personally, "Old Jock" was not of a sympathetic nature; yet he encouraged by word and deed such young men as were really industrious and persevering. He required no relaxation himself, however, and gauged other people's wants by his own.

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

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

PRINCIPAL WORKS :--

- "Observations on the Cause of Ergot on Grasses," in Transactions of the Linnean Society, xviii. (1840) pp. 449-452.
- "Notice of a Plant (Calebogyne ilicifolia) which produces perfect Seeds without any apparent action of Pollen," in Transactions of the Linnean Society, xviii. (1841) pp. 509-512.
- "An Enumeration of the Ferns of the Philippine Islands," in Hooker's *Journal of Botany*, iii. (1841) pp. 392–422.
- "An Arrangement and Definition of the Genera of Ferns," in Hooker's *Journal of Botany*, iv. (1842) pp. 38, 147; Hooker's *London Journal of Botany*, i. (1842) pp. 419, 659; ii. (1843) p. 378.
- "Characters of 20 new Genera of Ferns," in Hooker and Bauer's Genera Filicum, 1842.
- "An Enumeration of the Ferns cultivated at Kew in 1845," in *Botanical Magazine*, lxii. (1846); *Companion*, pp. 7-39.
- "Enumeration of the Ferns collected during the Voyage of H.M.S. 'Herald,' in Seemann's Botany of H.M.S 'Herald,' pp. 44, 226-244, 337-344, 425-431.
- 'Catalogue of Ferns cultivated at Kew and other British Gardens, with Characters of the Genera.' 1857.
- 'Ferns, British and Foreign.' 1866.
- 'Domestic Botany.' 1871.
- 'Historia Filicum.' 1875.
- 'Bible Plants, their History.' 1877.
- 'Dictionary of Popular Names of Economic Plants.' 1882.

All in the Library at Kew.

ALEXANDER WILLIAMSON.

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

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

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

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

DANIEL McLEOD.

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

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

CHARLES W. CROCKER.

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

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

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

Writings: "Notes on the Germination of certain Cyrtandreæ," Journal of the Linnean Society, v. p. 65, with a plate, 1861.

ALLAN A. BLACK, A.L.S. (Curator of the Herbarium, 1853–1864.)

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

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

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

OBITUARY NOTICES: Gardeners' Chronicle, 1866, p. 102, by Dr. J. D. Hooker; Journal of Botany, 1866, p. 64, by Dr. B. Seemann; Proceedings of the Linnean Society, 1865-66, p. 1vi; Botanische Zeitung, 1866, p. 95, by Dr. H. G. Reichenbach.

WRITINGS :-

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

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

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

ALEXANDER SMITH.

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

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

OBITUARY NOTICES: Journal of Botany, 1865, pp. 199-100; Gardeners' Chronicle, 1865, p. 464.

^{* &#}x27;Journal of the Linnean Society,' x. p. 42, and Hooker's 'Icones Plantarum,' t. 1004.

WRITINGS :-

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

"Notes on the Principal Plants employed in India on account of their real or supposed Febrifuge Virtues," Markham's Travels in Peru and India, pp. 546-565. 1862.

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

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

Walter Hood Fitch, F.L.S. (Botanical Artist, Kew, 1841-1892.)

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

Obituary Notices: Journal of Botany, 1892, pp. 100-102, with a portrait; Gardeners' Chronicle, 3rd series, xi. p. 120 (1892).

BERTHOLD CARL SEEMANN, Ph.D., F.L.S., &c. (Botanist on the Voyage of the 'Herald,' 1847-1851.)

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

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

WRITINGS :-

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

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

RICHARD OLDHAM.

(Botanical Collector in Japan, 1861-1864.)

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

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

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

WRITINGS :-

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

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

PIONEERS! O PIONEERS!

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

"O to die advancing on!

Are there some of us to droop and die? has the hour come?

Then upon the march we fittest die, soon and sure the gap is filled,
Pioneers! Pioneers!" (Whitman.)

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

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

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

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

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

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