

of Dr. Wallace as a possible editor, although that veteran explorer was a contemporaneous worker in some of the regions Spruce himself investigated. This was doubtless due to the knowledge that Dr. Wallace was fully occupied with work of his own, and that Spruce's writings were of a fragmentary nature, and so full of contractions as to be sometimes, in his own words, "hieroglyphic." Shortly after Spruce's death in 1893, however, Dr. Wallace offered to examine the journal and letters, and compile a narrative if the materials proved to be suitable. But Dr. Wallace and Spruce's executor, Mr. M. B. Slater, were both so fully engaged that eleven years passed before the preparation of the present volumes was actually begun. Regarding the result Dr. Wallace says:—

"I have myself so high an opinion of my friend's work, both literary and scientific, that I venture to think the present volumes will take their place amongst the most interesting and instructive books of travel of the nineteenth century."

Spruce was the son of a village schoolmaster, and was born in 1817 at Ganthorpe, a Yorkshire village. After his education under the direction of his father, he became a tutor, and subsequently a mathematical master at the Collegiate School, York. He had the greatest liking for natural history, and from the first made a special study of the lower forms of vegetation, such as mosses, lichen, and Hepaticæ. His health having failed whilst he was a tutor, he set out on an expedition to the Pyrenees, being assisted in this undertaking by several friends, including George Bentham and Sir William Hooker. He was very successful on this first journey, and after his return home his friends induced him in 1849 to undertake the exploration of the basin around the Amazon. Accordingly he sailed for Peru on June 7th of that year. He remained abroad for fifteen years, and his experiences during that time form the bulk of this work. He returned home a complete invalid, and the remaining years of his life were spent at Coneythorpe, close to his native village. It was not till twenty-one years after his return home that the 'Hepaticæ' was published in 1885, as a volume of the *Transactions and Proceedings* of the Botanical Society of Edinburgh. From that time until his death his sufferings were so great that he was incapable of doing much in preparing either his papers or herbaria.

Dr. Wallace's volumes show how conscientious Spruce was in every detail. He had a strong love for everything in nature, indomitable perseverance, and a keen eye for the systematic investigation of minute plants. The public owe a debt of gratitude to Dr. Wallace for presenting the story of the principal years in Spruce's life in so charming a manner. The volumes contain seventy-one illustrations and seven maps, with an excellent portrait of Spruce as a frontispiece.

It is a coincidence that *The Life of Philibert Commerson*, by Capt. S. Pasfield Oliver, edited by Mr. G. F. Scott Elliot (John Murray), should have been issued soon after the publication of the 'Notes of a Botanist on the Amazon and Andes.' In the former we read of the same sterling qualities of perseverance and heroic devotion to the pursuit of scientific knowledge that characterized Spruce. Although Commerson was one of the most striking persons in the history of eighteenth-century botany, he is unknown to most botanists who do not specialize in the systematic branch of the science. Systematists, however, can scarcely fail to know something of his work, for Commerson collected some 60 new

genera and 3,000 new species of plants. He described nearly 1,000 of these. Mr. Scott Elliot has prepared a fascinating volume from notes presented to him by Capt. Pasfield Oliver shortly before the latter's death. In a letter written to Mr. Scott Elliot in October, 1906, Capt. Oliver stated that, his health having quite failed, he was unable to finish the 'Life' of Commerson, whose "romantic story had always exercised a fascination over me ever since I had been in Mauritius and Madagascar in 1862, in which year a monument had been erected to Commerson in the Isle of France." Capt. Oliver, a man of wide culture and keen interests, found his task of collecting notes of Commerson one of peculiar pleasure.

It is unfortunate that Commerson's plants were never described as a collection, but many of them appear in the descriptions of Lamarck, Poiret, and Willdenow. Mr. J. G. Baker in 'The Flora of Mauritius' describes Commerson as the father of Mauritius botany.

We commend this book, which sympathetically relates the incidents of his life, to all who care to read of noble, self-sacrificing work, for Commerson may be described as a martyr in the pursuit of botanical science. It contains many attractive illustrations, including a fine reproduction of one of Commerson's sketches of a *Passiflora* and a photographic representation of Commerson's palm, *Latania commersonii*.

TWO GREAT BOTANISTS.

Notes of a Botanist on the Amazon and Andes. By Richard Spruce. Edited by Alfred R. Wallace, O.M. 2 vols. (Macmillan & Co.)—Before the publication of these volumes but little was known of the life and work of Richard Spruce, and this notwithstanding numerous contributions he made to scientific journals and the publication of his standard book on 'The Hepaticæ of the Amazon and the Andes of Peru and Ecuador.' The fact is that Spruce's published writings appealed to a limited circle rather than the whole body of scientific readers. But these two volumes excellently edited by Dr. Wallace will be welcomed by many naturalists, for they contain a record of Spruce's remarkable travels in the interesting country adjoining the Amazon and its tributaries, and the Andean highlands of Ecuador. They set forth the experiences of the fearless explorer during the time he collected the material for the work already mentioned, and incidentally form a record of adventure and romance that cannot fail to attract the general reader. Indeed, Dr. Wallace's aim has been to make the volumes as generally interesting as possible, though at the same time carefully preserving details valuable to the botanist. Numerous passages, and occasionally the greater part of a chapter, are printed in smaller type than that of the body of the work—a sufficient indication to the general reader that such technical portions may be skipped.

It was Dr. Spruce's intention to leave his manuscript and notes prepared during his travels (1849-64) to his great friend Daniel Hanbury, but owing to Hanbury's unexpected death and Spruce's chronic ill-health after his return home, all intention of editing and publishing them was abandoned. He appears not to have thought,