

it did, the monument of two great men's work, but unconnected with any organisation, either official or educational; other countries have been only too anxious to foster and develop any living starting point they could find.

A. D. H.

#### A HIMALAYAN LOCAL FLORA.

*Flora Simlensis: a Handbook of the Flowering Plants of Simla and the Neighbourhood.* By the late Colonel Sir H. Collett, K.C.B., F.L.S. Pp. lxxviii + 652. (Calcutta and Simla: Thacker, Spink and Co.; London: W. Thacker and Co., 1902.)

WHEN, in 1897, Sir Joseph Hooker wrote his preface to the final volume of the "Flora of British India," he gave it as one of the chief uses of his great work that it would "facilitate the compilation of local Indian floras." We believe that since that book began to issue, the handbook before us is the first general local flora that has been prepared for India, though various floras for forest purposes only have already appeared. Other general floras, for what are wider areas, are in course of preparation for Bengal, Bombay and the Upper Gangetic Plain; but although these floras will apply to whole provinces, or at any rate to areas as large as provinces, they will, none of them, cover so wide a vertical range, for the late Sir H. Collett's handbook practically treats of plants growing at all altitudes, from the Himalayan valleys only a little raised above sea-level to elevations of 12,000 and even of 16,000 feet. The area taken up is not one of exact geographical limits, but, as the author has said:—

"I have assigned no strictly defined limits to the 'Flora,' believing that this would answer the requirements of students better than if I were to confine it, for instance, to the territorial limits of the Simla Municipality or any other arbitrarily fixed boundaries."

It seems, however, to include every plant which a Simla botanist is likely to meet with in his rambles, and we feel sure that the book will be much appreciated, though we cannot avoid a feeling of great regret that its author has not lived to enjoy the pleasure he looked forward to of knowing that he had done something to help those who are already students of his favourite science, and perhaps to induce more of those Indian officers who want a pursuit to occupy their leisure time, to follow in his footsteps and study the plants of the forests, glens and slopes of the Simla mountains.

It has not been an uncommon thing at Simla to hear the wish expressed that someone would publish a handbook of a not too difficult scientific character, giving the names and descriptions of the chief plants; and, as the author has explained in his preface, it was with the desire of supplying this want that he commenced his work. A careful examination of the book shows that his efforts have been successful. The descriptions are concise and couched in the simplest language; the analyses lead easily to the genus and species required; while the excellent pen and ink drawings prepared by Miss M. Smith, of Kew, will be a great additional help to those who consult the work. These drawings have been judiciously selected, to illustrate, not only the chief genera and species, but also the most common and conspicuous plants to be met with in Simla and its neighbourhood.

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In addition to the characters of the natural orders, genera and species, and to analyses and an account of the geographical distribution of the plants, many useful notes are given which are sure to be of interest. As a sample may be cited the brief account of the method of fertilisation of *Roscoea*, a genus of gingers with purple flowers, where the mechanism by which the anthers are caused to shed their pollen on the backs of the insects which visit them is shown to be similar to that of the quite different genus *Salvia* in Labiatae. The derivations of the generic names have been duly explained, and wherever it has seemed of interest, reference has been made to such books as Darwin's "Origin of Species," Fritz Müller's "Fertilisation of Flowers" and Kerner's "Natural History of Plants." It is clear that Sir Henry Collett took the greatest pains to make his book as useful as possible, and it is well that the pioneer of Indian local floras will be such an excellent model for future work of the kind. To the author, as every page of his book shows, his work must indeed have been a labour of love. It will be useful to residents and visitors, not only in Simla, but in the other hill resorts in the Punjab, while even in the more easterly ones—Chakrata, Mussooree, Nainital—where the flora is richer, the book will be of considerable help to those interested in plants.

Besides Sir H. Collett's own preface, the descriptive portion of the work is preceded by an "In Memoriam" notice of the author by Sir W. T. Thiselton-Dyer, K.C.M.G., F.R.S., the Director of Kew, and by an "Introduction" by Mr. W. B. Hemsley, F.R.S., the curator of the herbarium at the Royal Gardens. In his notice, Sir W. T. Thiselton-Dyer gives a brief account of the life of the author, who, during a long and distinguished career as a soldier, studied science, and especially botany, in his leisure moments, and after his retirement in 1893 commenced the present work, which he only just lived to complete. Sir William finishes his notice by saying:—

"No one who has ever come to work among us at Kew has more completely won the affectionate regard of everyone with whom he has come in contact."

In his "Introduction," Mr. Hemsley gives a brief account of the geography of Simla, of its vegetation and of the chief botanists whose collections have been utilised in the preparation of the handbook. Some idea of the extent of the flora of the small Himalayan area to which it refers is obtainable from the fact that the handbook describes no less than 1326 species belonging to 639 genera and 113 natural orders.

We may conclude this brief account of a noteworthy botanical handbook with the following extract from the address of the president at the anniversary meeting of the Linnean Society on May 24 last:—

"In Sir Henry Collett we lose an accomplished botanist who was also a gallant soldier and a capable administrator, a combination of qualities that seems to be peculiarly British. It would not be easy to estimate how much this Society, and other kindred societies, owe to the public services, and more particularly the Indian, for the invaluable recruits whom we continually draw from their ranks."

We can hope that the "Flora Simlensis" will prove as enduring a memorial of its author as the record of his achievements, military and administrative, is likely to be in the history of the Indian Empire.

J. S. G.