

part of a collection of exotics; but since the reason for their many strange and complicated forms was set forth by Mr. Darwin, in his work on their fertilization, the name 'orchid' at once suggests a plant worthy of more careful study. While we do not have *Angraecum*, *Pterostylis*, or *Catasetum* among our wild plants, to indicate the extreme adaptation to insect-pollination of which the family is capable, our flora contains many species quite as interesting to the student as those to be seen in most collections; and Mr. Baldwin has done very good service in collecting the scattered notes on their peculiarities. Of the fifty-nine species or well-marked varieties of our eastern flora, no less than forty-seven are found in New England; so that the book is of more than local interest. With few exceptions, the sixty illustrations, the larger ones mostly from nature, are very good; some are excellent, and show not only a botanist's knowledge, but an artist's appreciation of light and shade and of the value of a well-selected background. The writer's style is pleasing; and, if the professional botanist might feel disposed at times to criticise it as sacrificing something of precision for the sake of avoiding technicality, it contrasts very favorably with the many popular books whose only merit is their style, since every page shows personal study. It is not surprising that a popular book on a group which has long been an object of special observation should contain little that is new; yet this is far from being entirely devoid of new matter, and is worthy of a place on the shelves of the specialist as well as of the amateur.

INDIAN FOLK-LORE AND ETHNOLOGY.

The Algonquin legends of New England; or, Myths and folk-lore of the Micmac, Passamaquoddy, and Penobscot tribes. By CHARLES G. LELAND. Boston, Houghton, Mifflin, & Co., 1884. 400 p. 12°.

A migration legend of the Creek Indians, with a linguistic, historic, and ethnographic introduction. By ALBERT S. GATSCHET, of the U. S. bureau of ethnology. Vol. i. [Libr. abor. Amer. lit., iv.] Philadelphia, Brinton, 1884. 257 p. 8°.

THE comparison of languages, if made on scientific principles, affords undoubtedly the best, and indeed the only sure, means of tracing the relationship of different branches of the human race. Next to this method, though at a long interval, comes the study of their myths and legends. This study, though inferior in the certainty of its deductions to that

of comparative philology, has certain evident advantages in other respects. We learn from it the intellectual and moral traits of the people who preserve and repeat the legends. We get to understand their habits of life, their ways of thought, their views of this world, and their ideas of a future life. Occasionally, also, we gather traces of genuine tradition, sometimes even of a far distant past, which, when corroborated by the evidence of language and perhaps other memorials, may be of real historical value.

Mr. Leland has been obliged by want of space, as he tells us, to exclude from his present work the historical legends which he has collected, and which, it is to be hoped, will be hereafter published. His work is thus entirely made up, as its titlepage professes, of what may properly be termed the 'myths and folk-lore' of the eastern or Abenaki branch of the great Algonquin race. As such it must be deemed one of the most valuable as well as most interesting contributions that have been made to this department of knowledge. The collection comprises some seventy stories, distributed under different heads, such as 'Gloos-hap the divinity,' 'The merry tales of Lox the mischief-maker,' 'The amazing adventures of Master Rabbit,' 'The Chenoo legends,' 'Tales of magic,' and some minor divisions. The whole work shows the hand of an experienced writer, who is at once practised in the literary art, and alive to the requirements of science. The stories themselves display much imaginative power and a genuine sense of drollery. As evidence of intellectual capacity in their framers, some of them will bear comparison with any thing contained in Grimm's Teutonic legends. Mr. Leland is disposed to consider them superior to the legendary tales of the other Indian tribes, but in this view he is certainly mistaken. There is no reason for supposing that the Abenaki Indians surpassed in intelligence the Algonquin tribes of the west and south, or their neighbors of the Huron-Iroquois stock. These, indeed, are known to possess a folk-lore of remarkable extent and interest, which, in the specimens we possess, is not at all inferior to that disclosed to us in the present volume.

The author, in his preface, modestly announces that his chief object has been, not to discuss theories, but to collect and preserve valuable material for the use of better ethnologists to come hereafter, who, as he humorously suggests, "will be much more obliged to him for collecting raw material than for cooking it." This captivating humility, the reader

presently perceives, is merely an exhibition of the highest literary skill, for it precludes the suggestion of the most novel theory thus far propounded in regard to the mythology of any Indian tribe. This theory, which is sustained with much ingenuity and learning, supposes that the myths current among the north-eastern Algonquins are in great part derived from, or colored by, the legends of the Norse mythology. The author assumes that the Norse colonists, who dwelt for three centuries in Greenland, having there at one time as many as a hundred and ninety villages, taught these ancient legends to their Eskimo visitors and dependants, by whom the stories were in turn communicated to their Algonquin neighbors. He points out many resemblances in the personages and incidents of the two mythologies which are certainly remarkable; and he even traces the name of the mischief-making semi-deity Lox of the Abenakies to the evil-working Loki of the Edda tales. At times, however, he finds these resemblances of folk-lore extend to so much wider limits, both in the old world and in the new, that he is disposed to refer them to a far earlier and more primitive intercommunication, prevailing at the time when one pre-Aryan race inhabited both continents.

There is nothing incredible, or indeed improbable, in either theory. Without necessarily adopting them, — and the author himself has not fully made up his mind about either of them, — students of folk-lore may be grateful to any thoughtful fellow-worker who can suggest new lines on which their inquiries may be conducted. They will not, of course, forget the more common explanation, which supposes that similar beliefs may often arise from mere similarity of circumstances. Given the striking resemblance which Mr. Leland himself has well pointed out, between the regions inhabited by the Norsemen and by the Abenakies, and in the character and pursuits of the two races, can we then account for all the coincidences of their folk-lore? Half a dozen resemblances of words, like that between Loki and Lox (which, by itself, may be a mere accident), would suffice to settle this question and to establish Mr. Leland's Norse theory. The decisive value of language as a test in ethnological investigations could hardly be better exemplified than by this statement, the force of which every one will appreciate. Until this test has been satisfied, the author's theory remains only an ingenious and plausible suggestion.

Mr. Gatschet's work, as might be expected from his former publications, is of a purely

scientific character; but in this sphere it takes a wide range. It is based on an ancient legend of the Creek or Maskoki Indians, which is partly mythological, and partly historical. This legend, of which the text and translation are given at the close of the present book, is to be more fully elucidated in the forthcoming volume. As it treats of the origin of the Creek nation, and their journeyings from the west, with their wars and other adventures among the people whom they encountered until they arrived at the eastern region in which they were found by the whites, the author has deemed it a suitable basis for a full description, not only of the Maskoki tribes themselves, but also of the surrounding communities. His first or introductory volume thus comprises an account of all the southern tribes of the United States, from the Atlantic seaboard to the western limit of Louisiana, so far as these are known. The history and character of each tribe, and its ethnical relations, are clearly explained. The classification is based on language, which the author justly considers to be the only scientific method. He has devoted much attention to the languages of the Maskoki stock, and gives abstracts of the grammatical characteristics of several of these tongues, which will be of much use to students of philology. The systems of government of the various tribes, their social usages, their modes of warfare, and their religious views and rites, are described with many interesting details. The volume forms a thesaurus of authentic information concerning the southern races, and will hold a high position as an authority on the ethnology of these tribes, and the archeology of the region which they formerly inhabited. The more extended notice which its contents deserve must be deferred until the appearance of the second volume.

RECENT CHEMICAL TEXT-BOOKS.

Traité pratique d'analyses chimiques et d'essais industriels. By RAOUL JAGNAUX. Paris, *Doin*, 1884. 12+503 p. 8°.

The elements of chemistry. By F. W. CLARKE. New York, *Appleton*, 1884. (*Appleton's science text-books.*) 10+369 p., illustr. 8°.

Lessons in chemistry. By W. H. GREENE. Philadelphia, *Lippincott*, 1884. (*Lippincott's science series.*) 357 p., illustr. 8°.

A short text-book of inorganic chemistry. By DR. HERMANN KOLBE. Translated and edited by T. S. HUMPHREY. New York, *Wiley*, 1884. 16+606 p., 1 pl. 8°.