

but we have no room to explain them at length in the present article. It is the less necessary to do so, as the final conclusion of the subject is very well embodied in two lines of the table of contents:—"The origin of the prominences still a mystery," "The corona's true nature also unknown."

Respecting the general spirit of the work, it may be remarked that while the author doubtless intends to do justice to all the investigators whose labours he describes, there is one feature of the work which may lead the reader to doubt whether he has really done so. We refer to the indications of personal feeling scattered here and there, and the depreciating tone adopted in treating of the labours of those he does not personally like. However this may be, there are few or no popular expositions of a scientific subject in which the observations, opinions, and labours of so many men of science have been collected and referred to their authors.

S. NEWCOMB

FOREIGN SCIENTIFIC ASSOCIATIONS

Proceedings of the Scientific Association of Trinidad, 1866-69, Port of Spain. (London: Trübner and Co.)

Proceedings of the Essex Institute. Vols 4 to 6. 1864-70. Salem, U.S. (London: Trübner and Co.)

Journal of the North China Branch of the Royal Asiatic Society. 1864-68. New Series. (Shanghai: A. de Carvalho. London: Trübner and Co.)

THE Scientific Association of Trinidad has now been in existence for some years. Its object is "the cultivation of scientific knowledge in the West Indies;" and if we may judge by the character of most of the memoirs contained in the parts of the Proceedings hitherto published, it must be a very useful society.

Dr. Mitchell has communicated more papers than any other member. He has contributed articles "On the Use of Sulphites in Medicine," with an "Additional Note on the Use of Sulphites and Bisulphites, whether Medicinally or otherwise," "On Earth Closets," "Hints on the Breeding and Rearing of Horses," "On the Manufacture of Sugar by the Process of Drying the Cane," and "On the Manufacture of Sugar by Evaporation." Mr. Guppy contributes three papers, "On the Mollusca of Trinidad," "On Petroleum and Naphtha," "Remarks on the Cultivation of Scientific Knowledge in Trinidad," "On the Tertiary Fossils of the West Indies," and "On the Marine Shells found on the Shores of Trinidad." Amongst other articles of permanent interest we may especially mention Dr. Goding "On the Petroleum or 'Green Tar,' and the 'Manjack' of Barbadoes," the Hon. Richard Hill, "On Poisonous Fishes," and "On Fish Poisons;" and Mr. Prestoe's "Catalogue of Plants in the Royal Botanic Gardens." Many of the subjects treated of in these Proceedings serve to illustrate various points described by the Rev. Canon Kingsley in his charming "Letters from the Tropics."

The Essex Institute seems to have commenced its existence as the Essex County Natural History Society, and it published a "Journal" as early as 1836. This Journal sub-

sequently merged in the "Proceedings" and "Historical Collections" of the Institute, the former commencing in 1848, and the latter in 1859. It is only with the "Proceedings" that we have to deal at present, and the volumes now before us contain "The Records of the Meetings, the Written Communications on Natural History and Horticulture, and the Naturalist's Directory." Amongst the most important memoirs we may especially notice Morse "On a Classification of Mollusca based on the Principles of Cephalization;" Verrill's "Synopsis of the Polyyps and Corals of the North Pacific Exploring Expedition from 1853 to 1856, collected by Dr. Stimpson;" Hyatt's "Observations on Polyzoa;" Dr. Wilder's "Revision of researches and experiments upon Silk from Spiders, and upon their Reproduction, by Raymond Marià de Termeyen, a Spaniard, translated from the Italian;" Horace Mann, "On the Flora of the Hawaiian Islands;" Cowes's "Catalogue of the Birds of North America in the Museum of the Essex Institute;" Wood, "On the Phalangeæ of the United States;" and Packard "On Insects inhabiting Salt Water."

These quarterly "Proceedings" came to a close at the end of the year 1868, when the "Bulletin of the Essex Institute," which appears in monthly parts, took its place. The "Bulletin," which we shall take an early opportunity of noticing, contains "All the short Communications of General Interest, both of an Historical and Scientific character, made at the Meetings of the Institute, and the Records of the Meetings and Business of the Institute."

Turning from the West to the uttermost parts of the East, we take up the "Journal of the North China Branch of the Royal Asiatic Society," of which the new series commenced in December 1864, when the Society which had been formed in 1861 was reorganised.

The papers contained in this Journal are for the most part very interesting, in consequence of their treating of subjects on which comparatively little is known in this country. The geographer will find articles "On the City of Yeddo," "On the Overland journey from St. Petersburg to Peking," "On an Overland trip through Hunan from Canton to Hankow," "On the Sea-board of Russian Manchuria," "On a Journey from Peking to Chefoo *via* the Grand Canal," "On a Journey from Peking to Shanghai," and "On a Journey from Canton to Hankow through the Provinces of Kwangtung, Kwangsi, and Hunan." The naturalist (using the term in the widest sense) will find articles "On the Geology of the Great Plain, and of a portion of Quangtung Province," "On the Coal-fields in the South Eastern Province of China," and "On the Bituminous Coal Mines west of Peking," "On the Birds and Beasts of Formosa," "On Chinese Notions regarding Pigeons and Doves," "On some Wild Silk Worms of China," "On the Entomology of Shanghai," "On the Sorgo or Northern Chinese Sugar Cane," and "On the mineral and other productions of North China and Shantung." Amongst other valuable papers may be mentioned those by the late Dr. Henderson "On the Medicine and Medical Practice of the Chinese," by Dr. Bastian "On the Remains of Ancient Kanbodies," Dr. Keer "On the Great Examination Hall at Canton," the Rev. A. Wylie "On the Opinions of the Chinese with regard to Eclipses, and on the Eclipses recorded in Chinese works,"

Mr. Hollingworth "On the Chinese Game of Chess," Mr. Forrest (acting Consul at Ningpo) "On the Christianity of Hung Tsiu Tsuen, being a Review of Taeping Books," and the Rev. S. R. Brown's translation of a curious old Japanese manuscript entitled "Annals of the Western Ocean." The last-named article is one of singular interest in many respects. It is divided into three parts, the first of which contains an account of the arrest of a Roman Catholic priest upon an island called Yaku-Shirna in the year 1708, his removal to Nagasaki and examination there, and his subsequent arrival at Yeddo, imprisonment, trial, and death. The name of the person as given in Japanese syllables was Jean Baptista Shirotte, and he is supposed to have been the last Roman Catholic missionary who landed in Japan previous to the year 1859. The second part contains the report of the prisoner's examination, and the information obtained from him respecting the military and naval power, and the wars and conquests of the Western nations; while the third comprises the missionary's answers to the questions put to him about himself and his family connections, his reason for coming to Japan, and his religious creed.

From the very curious paper on the "Birds and Beasts of Formosa" which is translated by Mr. Swinhoe, H.B.M. Council at Taiwan, from the 18th chapter of the "*Tai-wan-foo-che*, or Statistics of Taiwan," we learn that "as soon as the doe that has finished suckling observes her roe getting to maturity, she deserts it and repairs to other hills, fearing that her young might entertain an improper affection for herself. Animals do not confuse the laws of consanguinity, the horse excepted. The doe deprives her offspring of any such opportunity by setting a distance between herself and her young." We have quoted this passage because it contains almost the identical views expressed by Aristotle,* but we suspect that this idea is not based on any sound foundation.

Several of the articles, and especially those of Dr. Henderson "On the Medicine and Medical Practice of the Chinese," and of Mr. Walters "On Chinese Notions about Pigeons and Doves," throw considerable light on the absurd mode of practice adopted by the native doctors. From the latter paper we learn that the eggs of pigeons are an antidote to the injurious effects of boils and smallpox. Some persons may think the remedy worse than the disease, as the following course has to be followed:—Two eggs must be hermetically sealed in a bamboo tube and placed in the middle of a cesspool for half a moon. The whites are then to be mixed with three ounces of *shen-sha*, a very fine red sand-like substance, and the compound is to be divided into pills of the size of a green pea. If thirty of these pills are taken three times a day, the patient will soon find relief, for the poisonous matter will be rapidly discharged by the bowels and kidneys. The excrement of the same bird, when roast to cinder and soaked in wine, forms a cure for cold on the chest, and there are several other affections in which it is very useful. Let us conclude with a pleasanter remedy. "Of the *shi-chin* or wood-pigeon it is written that its flesh is sweet, delicate, and without poison. It also gives one a composed mind, and enables him to do with little sleep.

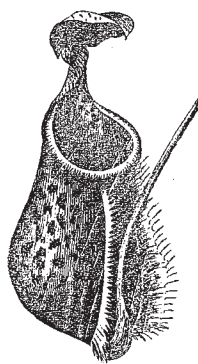
Its foot and leg bones have the very delightful quality of exciting affection between husband and wife. If on the fifth day of the fifth moon the husband takes one of these bones and the wife takes one, each putting the bone in a basin of water, one from the left and the other from the right side, the two bones will come together and float together, thus indicating a long and happy union to the parties trying the experiment."

G. E. D.

OUR BOOK SHELF

A Manual of Structural Botany for the Use of Classes, Schools, and Private Students. By M. C. Cooke. New Edition. (London: R. Hardwicke.)

WE have so often felt it our duty to expose the incompetence of those who attempt to write elementary text-books of science, that it is a real pleasure to come upon one like Mr. Cooke's "Manual of Botany," where a man of really



Pitcher of *Nepenthes*

accurate scientific knowledge applies himself to writing an elementary work on the rudiments of his science. The special object of the publication, as stated in the preface, is to supply a cheap manual to place in the hands of students in the Botanical Classes established for operatives in connection with the Department of Science and Art; but it may well be used as a first book to prepare for other objects, as, for instance, for the first B.Sc. examination, or that for Women, at the University of London, though it would then have to be supplemented by others on the systematic branch of the subject. The descriptions are clear and accurate, and expressed in commendably terse language. It is illustrated by over two hundred woodcuts, some of them of decided merit; and we have reserved our crowning sentence of commendation till the last—the price is one shilling!

A. W. B.

Geographisches Jahrbuch. III. Band, 1870. Unter Mitwirkung von A. Anvers, J. Baeyer, A. Fabricius, A. Griesbach, Fr. Müller, Fr. Neumann, L. K. Schmarda, F. R. Seligmann, J. Spörer, H. Wagner:—Herausgegeben von E. Behm, Mitredakteur von Petermann's Geogr. Mittheilungen, 1870. (Gotha: Perthes. London: Williams and Norgate.)

WE lately had occasion to speak in terms of high commendation of Vivien de St. Martin's *Année Géographique*, and we can award equal praise to Behm's corresponding work, which is the more elaborate of the two, and consequently the less agreeable to the ordinary reader. It is divided into four parts, devoted respectively to Geographical Chronology, Geographical Statistics, Essays on the Progress of Geographical Knowledge, and Tables of use in Mathematical Geography. The first part consists of a geographical calendar, stating the date of the discoveries of various countries, of the birthdays and deaths of great geographers, &c. (for example, on the day on which we are now writing, April 22nd, J. Richer arrived at Cayenne, 1672; the island of Rea or Wallis was discovered by Maurelle, 1781; Reao was discovered by Duperry, 1822; Denham arrived at India (Mandara) 1823; and the *Novara* sailed from Singapore, 1858); and it treats of the manner in which time is calculated in certain countries. The second part is extremely valuable, but is very dull; any information that may be required as to the state of the population of any country, of the number of houses and inhabitants in a square mile, &c., may be readily found here. The third part consists of extremely

* See his "History of Animals," Book ix., chap. 34 (Creswell's Translation in Bohn's *Scientific Series*), in which he tells two very remarkable stories regarding a camel and a stallion in relation to this subject.