## AUSTRALASIA

Australasia. Edited and Extended by A. R. Wallace. With Ethnological Appendix by A. H. Keane, M.A. (London: Stanford, 1879.)

THIS stout octavo volume is one of the series entitled
"Stanford's Compendium of Geography and Travel,"
based on Hellwald's "Die Erde und ihre Völker."
Mr. Wallace tells us, however, in the preface that he has
been able to utilise comparatively little of the translation
of Hellwald's work, so that it forms little more than onetenth part of the present volume.

The term Australasia is taken in a very wide sense to include the entire East Indies and the Philippines, New Guinea and Australia, and all the islands of the Pacific, even to Easter Island. The region extends thus around much more than one-third the circumference of the globe.

The book commences with a short general account of the main geographical and biological features of the area and then treats of its various subdivisions separately. The author divides his Australasia into six principal regions, viz., Australia, Malaysia, Melanesia, Polynesia, Micronesia, and New Zealand. He commences with a very interesting summary of the principal physical features and climatic conditions of Australia.

Australia with Tasmania is only a little less in area than Europe. Yet its highest mountain, Mount Kosciusko, is only 7,308 feet in height. Its greatest river, the Murray, has a basin the area of which is about equal to that of the Dnieper. The hottest climate in the world probably occurs in the desert interior of Australia. Capt. Sturt hung a thermometer on a tree shaded both from sun and wind. It was graduated to 127° F., yet so great was the heat of the air that the mercury rose till it burst the tube, and the temperature must thus have been at least 128° F., apparently the highest ever recorded in any part of the world. For three months Capt. Sturt found the mean temperature to be over 101° F. in the shade. Nevertheless in the southern mountains and tablelands three feet of snow sometimes falls in a day; in 1876 a man was lost in the snow on the borders of New South Wales. Snowstorms have been known to last three weeks, the snow lying from 4 to 15 feet in depth and burying the cattle. Forty miles of the railway from Sydney to Bathurst have been seen covered continuously with snow. Australia is the land of drought and flood. The annual rainfall at Sydney has varied from 22 to 82 inches. Lake George, near Goulburn, was, in 1824, 20 miles long and 8 miles broad.

It gradually shrank till, in 1837, it became quite dry, and its bottom was converted into a grassy plain. In 1865 it was a lake again, 17 feet deep; two years later, only 2 feet deep; and in 1876 it was 20 feet in depth.

The account of the flora of Australia Mr. Wallace takes from Sir Joseph Hooker's exhaustive essay. In the description of the zoology he makes a curious slip in stating (p. 57) that the Banded Ant-eater (Myrmecobius) has a greater number of teeth (fifty-two) than any known quadruped. He quite forgets the big Armadillo (Priodonta), which has nearly twice as many, to say nothing of the crocodiles. It is also hardly correct to say that the Monotremes have no teeth.

After an interesting summary of the geological features of the country and of the mode of occurrence of gold, an account of the natives ensues. It contains interesting information, but seems hardly precise enough, those points in culture in which Australians differ from all other races being hardly brought out with sufficient dis-Such a statement as "that the life of the Australian native is one of abundance and privation, idleness and activity," might be made of all savages in the world. It is hardly accurate to describe a boomerang as " about three feet long," boomerangs being used of very various sizes, and many of the Western Australian and Queensland weapons being of about only a foot and a half in length. Again, why denote the spear thrown by means of the throwing-stick as "about ten feet long"? The spears thus used are of most various lengths, and some employed at Cape York are not more than five feet long at the most. Again, the throwing-stick is not always "a straight flat stick," but ranges through many forms, one being oval and shield-like.

Throughout the book the implements and weapons of natives are described in a slipshod and insufficient manner, as where the Papuans are stated to possess "Knives and axes, both formed of sharply chipped flints, resembling those of the stone age found in Europe." We believe that no flint implement has ever been found in New Guinea. The Papuans have knives of obsidian, and stone-headed axes and adzes, but the blades of these latter are not made of flint, but of jade or greenstone, or some similar material, and are not chipped to an edge, but invariably ground smooth all over. The only recent savages, apparently, who employ unground stone axe blades are the Australians, and very many of their blades are wholly or partially ground. Again, the canoes of the Admiralty Islanders are described as "formed of a hollowed tree with the sides raised by a plank and fitted with an outrigger." Such a description might apply to numberless other canoes occurring in Mr. Wallace's region of Australasia. The peculiar interest in the Admiralty Island canoe lies in its having two outriggers, or rather, an inclined balance platform opposite to the ordinary outrigger.

The real interest in the study of savage weapons and implements lies in the differences to be observed in the form and structure of the contrivances used by each race. The implements manufactured are often as characteristic of the race as is its language. They have certain general family resemblances in their form to those employed by nearly allied races and certain special peculiarities, some, like words from a neighbouring language, have been

imported, and may or may not have undergone subsequent modification, others are absolutely peculiar and characteristic. When taken as a whole they are as important for the elucidation of the past history, and the determination of the affinities of the races of men as are language, or even to some extent physical characteristics. A description of the implements used by a race in order to be of real value and interest, should point out what particular implements are peculiar to the race, and in what their peculiarity consists, and what are common to the race and its immediate allies. A mere catalogue of implements, ornaments, and weapons given without detail or explanation is valueless.

The several colonies of Australia are treated of in detail in the present work. In the account of New South Wales Port Jackson is, as usual, vaunted as one of the safest, deepest, and finest in the world, but it should always be remembered that though it is very pretty and very deep inside, its entrance channel is not deep enough to admit a first-rate ironclad, and that men-of-war sometimes suffer from lack of shelter in Farm Cove, and drag their anchors.

By an unfortunate slip, under the description of Queensland, palms of the genera Cycas, Areca, &c., are spoken of, a mistake the more misleading to unbotanical readers because Cycads are not unlike palms in outward appearance.

In the account of the Malay Archipelago which follows in the description of the Sulu Islands and their notorious pirates, it should have been mentioned that the Sultan of the islands has at last submitted to the Spanish rule on receipt of a sum of money. An arrangement to that effect was made about a year ago, and an agreement signed at Manila.

Dr. Horsfield's interesting account of the Tenger Mountain, the great volcano of Java, is quoted at somelength in the account of that island. The crater of the mountain is said to "exceed perhaps in size every other in the globe;" yet it is only four miles and a half in larger diameter and three and a half in smaller, whilst the great crater of Haleahala, in the Sandwich Islands, really the largest in the world, is twice as big, measuring over twenty miles in circumference. Curiously enough, no mention whatever is made in the book of this wonderful crater, nor of the island of Maui, in which it occurs, in the very meagre account of the Sandwich Islands, in the part of the work which treats of Polynesia.

The first portion of the work, which treats of Australia and the Malay Archipelago, is by far the best. The account of Polynesia generally which follows is most indifferent, as might be expected from the astonishing fact that no reference whatever is made to the two most important works on the subject, viz., Meinicke's "Inseln des Stillen Oceans," and Gerland's stout volume in Waitz's "Anthropologie." If good use had only been made of these works the result would have been far more complete and trustworthy; but a translation of Meinicke's work would have been better still.

The figure given as that of a native of Fiji is very unfortunate, since the face is represented as elaborately tattooed, whereas tattooing on the face is excessively rare in Fiji, and tattooing on men at all rarer still. It is not correct, however, to state that "in Fiji the women only are

tattooed" (p. 488). Good photographs of Fijians are so common now and so easily procured that it is a great pity one of these was not copied for the book.

With regard to cannibalism in Fiji the statement is made that perhaps nowhere in the world has human life been so recklessly destroyed or cannibalism been reduced to such a system as here, and the putting of twenty bodies into the ovens at one feast is described as most astonishing; yet the New Zealanders, who are necessarily also treated of in this book, were quite as systematic in their cannibalism and far more profuse, as many as 1,000 prisoners having been slaughtered and put in the ovens at one time by them after a successful battle.

In the general account of Polynesia the Polynesians are said to have no bows and arrows. This is a mistake; both Hawaiians and Tahitians had bows and arrows, as we know from the writings of Cook and Ellis, though they did not use these weapons for war purposes. Ellis's account of the sacred archery of Huahine, where the ancient archery ground was close to his residence, is most interesting and full of detail. arrows were also used in Tonga and Samoa. say of Polynesians generally that "all the men are tattooed from the navel to the thigh" (p. 495) is strangely misleading, since it would appear from it that all Polynesians were alike in their customs of tattooing, whereas, as is well known, the greatest differences occurred in this matter, and the description quoted would apply almost solely to the Samoans and Tongans, though there was a slight difference even between these two races in the matter.

Still more misleading is the statement that the Polynesians "have none of the savage thirst for blood of the Fijians," and that "their ceremonies are polluted by no human sacrifices; cannibalism with them has never become a habit." To such an absurd conclusion regarding Polynesians is the author led by his having separated off the New Zealanders from the Polynesians into a separate chapter. He treats of the New Zealanders correctly later on as "Brown Polynesians," like those he is describing as above. But cannibalism was not confined to New Zealanders amongst the Polynesians, but widely spread amongst all, occurring in the Hervey Islands, Paumotu, Tahiti, the Sandwich Islands, the Marquesas, and elsewhere. Human sacrifices were also regular institutions in all the islands, for example, in Hawaii, Tahiti, and the Marquesas, and in the latter group men killed their wives and children, and their aged parents for eating. In the time of Cook cannibalism was very much on the decline in Samoa and the Sandwich Islands, and had ceased in Tahiti, but evidence of its former more common occurrence was preserved in popular legends, proverbs, and traditions, and in some curious ceremonial customs. In the Paumotu Islands it long remained a regular institution, and Ellis saw a captive child there given a piece of its own father's body to eat. But what can be expected from a work on Polynesia which is without a reference to Ellis's "Researches," and in which Tonga is treated of without a reference to Mariner, or even mention of his name?

In the account of Tahiti Mr. Wallace becomes quite poetical, but stumbles rather in his zoology in consequence; he writes:—"The wayfarer's ears are ravished by the music of various songsters arrayed in the brilliant plumage of the

tropics." There is, indeed, one thrush-like bird (Tatare longirostris) in Tahiti which sings sweetly, especially in the higher mountain regions, but it is no more brilliantly coloured than are singing birds usually elsewhere, in fact as dull as most songsters in appearance. There are brightly-coloured birds amongst the meagre list of about twenty-six land-birds of the island, but these are fruitpigeons, parrots, and king-fishers. Though the great denudation of the surface of Tahiti is referred to the extraordinary steep and narrow ridges thus formed, and which are such characteristic features of its surface are not mentioned. The following passage will be most amusing to any one who knows anything of Tahiti. "At present we must visit the interior in order to see in their original forms the seductive dances of the native women. gaily decked with flowers." In fact the interior of the island is mountainous throughout, and uninhabited. The natives know very little about it, and it is quite a feat for a European to make his way across it. The dances in question take place usually close to the sea-shore, when they do occur now, and a large bribe administered to one of the native washermen will generally set one on foot, these worthies ministering to the pleasures of tourists as well as washing their clothes.

In the account of Rapanui (Easter Island), the conclusion "that at present the island is the great mystery of the Pacific, and that the more we know of its antiquities, the less we are able to understand them," is unworthy of the present state of ethnological knowledge. Too much mystery is made about the stone images of Rapanui, and in his "Tropical Nature," p. 291, Mr. Wallace, following Mr. A. Mott, actually brings these images forward as one of the proofs of a former general advanced intellectual condition of mankind as opposed to the accepted scientific position that primitive man was savage.

Earlier in the book he similarly cites the big upright stones found by Brenchley in Tongatabu as proving the existence of a preceding more highly civilised race. It is misleading to term these Rapanui remains "prehistoric," as implying that they have any vast antiquity. There is no reason to doubt that the present islanders, who are by language of Raratongan origin and by tradition come from Rapa Island, are the direct descendants of those who set up the images and constructed the underground houses for their chiefs. The wooden tablets with hieroglyphic inscriptions, and wooden gods cannot be very old, and the same characters are inscribed on the backs of the stone images, as may be seen in the case of the one in the British Museum as are cut on the slabs. The stone crowns on the images' heads merely represent the feather head-dresses worn by the chiefs. Similar blocks were appended to the heads of some of the Sandwich Islands gods and to the stone gods of the Marquesas Islands. The stone images are in point of artistic execution miserably low, and their workmanship does not go to prove that any high development of culture existed here in former times, though the absence of artistic merit would hardly be allowed to prove the opposite condition as to general culture by such authorities at least as those who ately erected a row of stone heads very little more advanced in their resemblance to the human form in front of the Sheldonian Theatre at Oxford. The Rapanui stone images resemble the wooden ones of the island in features in many points, and there is also a resemblance in form between these stone images and the smaller ones of other Polynesian islanders. Mr. Wallace makes all the mystery out of the fact that the present islanders know nothing of the images, but savages quickly forget. The very name of the image platform Moai, as Meinicke remarks, seems to be the same as that of the old Tahitian chief's burial places, "Marae," Hawaiian, "Morai."

The account of the Sandwich Islands is very short and contains several errors. Mauna Kea, the highest of the three volcanic mountains of the Island of Hawaii, is described as an active volcano instead of as extinct. Kilauea should hardly be described as the most remarkable "burning mountain" in the world. It is really a lateral crater only on the side of Mauna Loa, the terminal crater of which is far more remarkable when in eruption than that of Kilauea. It is rather stretching a point to speak of the crater of Kilauea as a fathomless oval abyss, for tourists from the hotel on its brink usually walk nearly all over its bottom on a floor of hard lava, and the descent to the bottom is no great one. The figure given in the text as representing Kilauea volcano apparently is taken from a sketch of one of the ponds of fluid lava usually present at one end of the bottom of the crater.

No account is given of the ethnological characteristics of the Hawaiians, and nothing of the importance of the Chinese settlers in the group, nor of that of the developing half-caste population. The establishment at Honolulu of the hostile Church of England Mission is spoken of with the warmest approbation, whereas most unprejudiced persons regard it as an unmixed evil that the natives who have been Congregationalists for nearly eighty years, should be interfered with by a different Protestant sect.

In the account of New Zealand (p. 564) the possibility is suggested of a former land connection having existed between the Kermadecs and New Zealand. Such a connection would explain well some of the peculiarities of the flora, especially of the ferns of the Kermadec Islands, but unfortunately a depth of 2,000 fathoms was found by the Gazelle to exist between the two places, and the connection cannot therefore have existed. It is surprising that Mr. Wallace speaks of the Kermadecs as interesting only because they form a stepping-stone to Tongatabu to assist in the migration of Polynesians: he forgets entirely the interest of their flora as described by Sir J. D. Hooker.

The work concludes with an essay by Mr. A. H. Keane, on the Philology and Ethnology of the Inter-Oceanic Races. A long and very useful catalogue is given of the inter-oceanic races and languages, and of their very numerous and puzzling native names, with good references appended. It is very voluminous, and we were astonished to light upon an omission in so complete a catalogue. It was that of the Lutaos, the native nam: for the Sulu pirate race.

On the whole, it is to be regretted that Mr. Wallace has not studied other German sources of information than Hellwald's work with care. The fact is it is too much to undertake to describe Polynesia together with the Malay Archipelago, Melanesia, and Micronesia, all in one volume, and the result has been that Polynesia has suffered in treatment. The most striking defect in the book, however, lies in the meagreness of the references, the

catalogue of which, at the beginning of the book is very small and contains almost solely English books. There is no reference to Finsch's work on New Guinea ("Neu Guinea und seine Bewohner") nor to the Goddefroys' publications; and with the splendid bibliography of Meinicke's and Gerland's works before us, the neglect of the literary side of the subject is most irritating; but Mr. Wallace, as most working zoologists know to their cost. neglected also to supply adequate references in his work on the "Distribution of Animals," and thus reduced the value of the work by at least one-half. If any one wishes to obtain a concise scientific account of any of the Polynesian or Melanesian islands, and references which will when consulted put them in possession of all the information to be obtained, they should read Meinicke's book, and not "Australasia."

In conclusion, our readers may be reminded that very much yet remains to be done in the exploration of the Australasian region, and most interesting results may be expected when the snow-clad Charles Louis Mountains of New Guinea, possibly 18,000 feet in height, shall have been climbed by the naturalist, and such other hitherto unvisited regions as the island of Timor Laut and the great central mountain of Ceram Nusa Heli, said to be near 10,000 feet in height, from which Mr. Wallace, who has best right to judge, expects great things.