23 A.—3.

The wife of Tonga—named Metua Rose—had numerous little nodules on the face and trunk; the left eye was completely spoiled, the cornea being quite opaque; the lower eyelid was everted exposing a thickened conjunctiva; there was drawing down and thickening of the lower lip and paralysis of the lower extremity. Maria, a daughter, aged about sixteen, of stunted growth, was so wizened and aged in appearance as to be easily mistaken for an old woman. Her face was covered with a crop of shining tubercles, larger and more distinct than those of her father, and had not commenced to ulcerate. The eldest son, To, was chiefly affected on the face, to the outer of and above the right orbit. Tuakoro, another daughter, had the hands chiefly affected by a crop of tubercles, but there were others scattered about the body. The other two daughters showed signs of commencing disease, such as slight discoloured anæsthetic patches, with a few nodules just commencing to appear. Speech seemed to be unaffected. Tonga complained of want of appetite and a desire to obtain some variety in his food. He said that he and his family subsisted entirely on cocoanuts and the fruit of the screw-pine (Pandanus, sp. unknown). Fish abound in the lagoon and near the reef, but Tonga informed me that they never caught any. There were pigs and fowls on the island, which one cannot but think they oceasionally eat, in spite of his assertion to the contrary. The food of the healthy Penrhyn-Islanders affords little variety. Penrhyn is merely a coral atoll. Cocoanuts and screw-pines are the only fruits obtainable. Yams, taro, and arrowroot will not grow, neither will oranges or bananas. Bananas they have frequently tried to grow, but without success. Their food, therefore, consists entirely of cocoanuts, the fruit of the screw-pine, fish (which they eat freely of and frequently eat raw), pigs, fowls, biscuits, and tinned meats (which last two items they obtain from the trader when circumstances permit). The occupation of the natives consists of diving for pe

From Penrhyn Island we went to the Island of Manahiki, where I was informed there were two lepers residing on the Islet of Toukou. I accordingly visited these people, one of whom, Tukerau, I am inclined to consider a leper, his case being one in which it is impossible to give a decided opinion on, because the physical signs were not well marked, and also because his answers were somewhat unreliable. Leading questions were avoided in this as in all examinations which I made as much as possible, but occasionally they were unavoidable. I obtained the following history from the man: Twenty-five years ago, when about eighteen years of age, he went to Honolulu in an English trading barque, and remained in Hawaii two years and a half, during which time he enjoyed perfect health. In 1871 he returned to Manahiki, to his home at Toukou, and for the next ten years enjoyed good health. In 1881 he commenced to feel pain in the body, face, and ears. The pain was accompanied by swelling, and soon a crop of small red spots made its appearance all over the body, and he began to lose the hair on his face, such as eyebrows and beard; also the hair on the arms, legs, and body disappeared, but the hair of the head remained unaffected. At the present time there is much thickening of the skin over the ears, accompanied by ulceration. The patches of ulceration are symmetrical, and situated at the upper extremity of that part known as the antihelix. There were cicatrices at the inner side of the inner canthus of the right eye. There is ulceration of the terminal phalanx of the right index-finger and the right toe. There was absence of anæsthesia, but there were a few tubercles scattered about the front of the chest and back. He had been

married several years, but has had no children.

The other case on the Island of Manahiki which was shown me was a case of pityriasis, and not one of leprosy as was supposed. Mr. Williams, a trader on Manahiki Island, gave me the following account of a case, which I have no hesitation in saying must have been one of leprosy. It occurred quite recently, and will doubtless in time be followed by other cases, as no attempt at isolation in this case was made. The history is as follows: Akata, a native of Manahiki, in the year 1874, or thereabouts, visited Honolulu, where he lived with a leper family for some little time (how long it is not known), and then returned to Manahiki. Two years later he showed signs of being affected with the same disease as the one which had affected those with whom he resided at Honolulu. Swellings appeared over the body and face, the swelling being most marked on the face. This swelling was shortly afterwards followed by a crop of pimples, these pimples being most numerous on the face and lower extremities. They gradually increased in size, became fissured, and finally ulcerated. The terminal phalanges of several toes dropped off. During the progress of the disease he became very weak, but his appetite continued to be fairly good up to the time of his death, in August, 1892. During the whole course of the illness the voice was unaffected. In the Island of Rakahango, or Reirson, which we next visited, I made inquiries as to leprosy, but could not hear of any case on the island. In the colonial hospital at Suva, Fiji, thanks to the kindness of the Government medical officers, Drs. Pound and Zimmer, I was enabled to see several very typical cases of tubercular leprosy. The photographs of two lepers I enclose, with those of the Penrhyn lepers, and the doubtful case at Manahiki. A short account of the two lepers at Fiji whose photographs I have sent: Sibdella, the shorter of the two is an Indian coolie, who arrived in Fiji nine years ago. Two years after his arrival anæsthetic and analgesic patches appeared on the thighs at the junction between the upper and middle chords; similar patches appeared on the right hand, and then on the face and ears. The terminal phalanges when I saw him were much swollen. Many of the tubercles which had followed the swellings in different parts of the body had broken down and ulcerated, but there were a great many polished shining tubercles on the face between the eyebrows, following the natural wrinkles of the skin, on the upper lip, and scattered about in various situations on the trunk and limbs, which showed no signs of ulceration. A tubercle, on close inspection, was discovered in the median line or raphe of the scrotum, the skin of which appeared to be thickened. Tongue and eyes unaffected, and from inquiries, the answers to which were somewhat ambiguous, we inferred that the genital functions were unaffected. Linga, the taller of the two, was aged about thirty, a native of the Solomon Islands, had been five years in Fiji, commenced to become sick two years ago, which would possibly be three years after being subject to contagion, though I have no information as to whether he was at once sub-