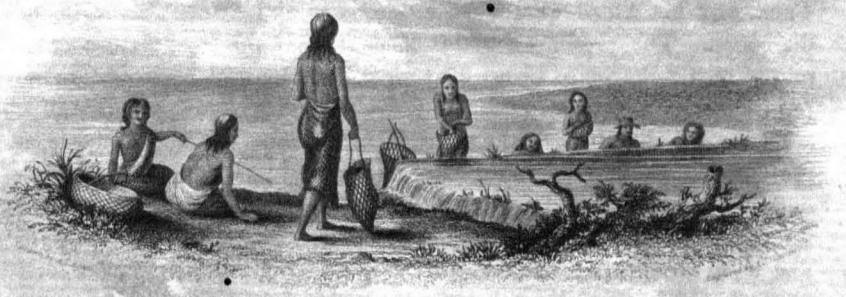
recent news from his own country and Peru, which he was desirous of hearing. He spoke much of the deprivation he suffered by a separation from his family, and from the want of society, but uttered not a word of complaint against his enemies.

He lives in a small cottage on the bank of the harbour at Papieti, where he is highly respected; his manner and whole deportment are gentlemanly; he is tall and robust, with a florid complexion, and appears about fifty-five years of age. In the chapter on Chili, his public acts have been sufficiently enlarged upon; and although his political course may have been much condemned, I can bear testimony to the high estimation in which his private character is held in his native country.



FISHERY—TAHITI.

There are many pretty walks about Tahiti; the small streams, flowing through luxuriant woods, add much to its beauty; these run bubbling along to the sea, passing many cool and pleasant places: their entrances are usually closed up by the natives, for the purpose of taking fish, a sort of dam being constructed, over which the waters flow, and the natives, standing on the outside up to their waists in water, are often seen taking the fish in baskets. The sketch by Mr. Agate is characteristic.

On arriving at Tahiti, or indeed at any of the islands, respect is naturally due to the chiefs; this, I am assured, was felt by us all; but long

before sailing we became disgusted with seeing these large and noble-looking men passing from ship to ship, even including Paofai himself, soliciting foul linen to wash, and performing other services that were not in keeping with their rank. There is one, however, whom I must do justice to,—Hitoti. He maintained the character given him by Captain Beechey. I was much pleased with his whole deportment on his visit to me, and also when I saw him at his own house; he paid but two visits to the ship, and those within a day or two of our departure. That he did not visit the vessels before, was in order, as was supposed, to avoid the suspicion of trespassing on our liberality; he refused to accept any presents, and would only drink wine when requested, performing all the little courtesies of the table with grace and politeness.

On his visit to the Peacock, Lieutenant Emmons and Mr. Hale being the only gentlemen on board, received him with the attentions due his rank; when taking leave, he requested to know their names, which were given to him in English orthography; he at once took out his pencil, and with great readiness wrote them in the Tahitian dialect, as "Emaani" and "Helavi!"

Dr. Pickering and Mr. Couthouy being desirous of making another attempt to reach the top of Orohena, I willingly gave them the longest leave possible, to effect their object. They determined on attempting the ascent of the ridge leading directly up from Matavai Bay, as the one that had appeared to them most practicable. Lewis Sacket, who has already been spoken of, was again their interpreter; for guide, Mr. Wilson recommended an old man by the name of Vahaore, who was said to be the only person now living who had visited the top of Orohena; in this selection they were fortunate: Vahaore had been in his youth a great warrior, and his looks did not belie it; he was of the middle size, thin and sinewy, and with a fine eye; although past sixty years of age, he had scarcely a gray hair; his gait was firm and his carriage erect; he was constant in his attention to his duties, and rarely spoke unless relative to his business.

After the guides had been engaged, our gentlemen passed the night in a native house close by, ready to start at an early hour. At daylight, Vahaore and his son were provided with ropes; the reason the old man gave for taking his son was that he might be able to learn the way. They now set out, and by nine o'clock had reached a higher point than at any time on their former journey: this was about three thousand five hundred feet, and was attained after having walked six miles; when they had reached the altitude of fifteen hundred feet they no longer found any paths; on arriving at this point, they halted for some time to make collections of land-shells, and some very interesting

specimens were obtained of Helices, Patulas, Cyclostomas, Curocollas, and Pupas; after this they continued ascending, the ridge gradually becoming narrower, until they reached a spot on the ridge where there was not room for one person to pass by another, and where they could look down a precipice on each side to depths of two thousand feet.

Plants that were below of small size here grew into large woody shrubs; among them a species of Epacris was found growing luxuriantly along the crest of the ridges, and magnificent arborescent ferns on the mountain sides, some of them forty feet in height; another species was seen whose fronds were more than twenty feet in length. Their path was much impeded by the tangled ferns and wiry grass (Gleichenia), which it was impossible to get through without the aid of a knife or a hatchet. They had now reached four thousand five hundred feet, the highest point yet attained, according to the guide, by white men; two o'clock had arrived, and as there was no place where they could encamp, or any chance of reaching a point suitable for passing the night in, by the advice of Vahaore they allowed him to look for one. The mountain top was still estimated to be six miles distant; they had little doubt that it could be ascended by following the ridge, and it was thought that they could accomplish the task if time permitted. The day was fine, and they enjoyed a view of the whole mountain, which appeared as if it were the centre, from which the different ridges of the island radiate in ten or twelve directions towards the coast, having deep and narrow valleys between them, through which the mountain torrents rush; these valleys spread out as they approach the coast, and the ridges become more rounded and accessible.

After reconnoitring the ground for some time, Vahaore recollected a place where they might pass the night, which he thought was not far distant. He therefore immediately began to break a road, which he continued for about a quarter of a mile along the ridge. He then reached a place where the descent might be made, which, however, to all appearances, presented as few facilities for the purpose as any they had before looked at. They, however, tried it, and after a hard scramble reached, about sunset, the place he sought. The descent was estimated to be about two thousand feet, and was performed partly by leaping from tree to tree, and partly by lowering one another by ropes over precipitous ledges from ten to twelve feet in height. In the words of Sacket, "No man in his senses ever went down such a place before, and none but a fool would attempt to do so again." At the foot of the descent lay the first valley, and they found themselves among groves of the wild banana (fahies).

A temporary shelter was soon constructed on the banks of a mountain stream, which ran headlong by. In this, Vahaore amused himself by catching eels, a sport in which he was expert, and which he performed in the following manner: having found a small basin at the foot of the cliff, in which an eel was concealed, he placed a large flat stone in the middle of it, and began to bale out the water with his hands; he next disturbed the fish, which sought shelter beneath the stone, when, by cautiously introducing his hands, he contrived to grasp it, and by a sudden jerk threw it thirty or forty feet into the woods, where he easily secured it. In this manner, two eels were taken, nearly four feet in length, and as thick as a man's arm. The eels were not skinned, but carefully cleaned and washed; they were then wrapped in leaves, and cooked in the usual Polynesian manner. Thus prepared, they proved a great delicacy. These eels, although much esteemed by the natives, appear to be almost unknown to the white residents.

The idea of ascending the peak was now abandoned, and in the morning they set out on their return to the coast. In their route, they crossed several spurs of the main ridge; about noon they again halted, and employed themselves in making collections, while Vahaore again went a fishing. He soon returned with three eels, the largest of which was upwards of three feet in length. These eels are of a uniform dark olive colour on the back, which passes on the belly to a dirty white.

Early in the afternoon they reached the lower valley, with the stream called Pappiamatia, about twenty yards wide, and from two to three feet deep, running down it. About five miles from the coast they passed a range of basaltic columns, one-fourth of a mile in length; the cliff presenting a perpendicular wall, rising up at the east side of the stream, formed columns, one hundred and fifty feet high; the number of sides varied from four to seven, and their diameter from nine inches to two feet. The ridge at whose base this was found, was upwards of two thousand feet high. The party reached Matavai Bay at sunset.

The ridge that our gentlemen followed, is considered by them as the most feasible route to the summit of Orohena; the greatest difficulty with which the attempt is attended arises from the dislike of the natives to visit places where they have not been before, and their anxiety to keep themselves within the region of the fairies.

Pitohiti might also be reached by the same route; there is little doubt that the latter has also been ascended by following the western branch of the Pappino valley, a route which was also considered feasible by our party; a third route might also be found by following the main branch of the Pappino, which, as will be seen on the map, rises behind Pitohiti.

This excursion furnished more full information in relation to the geological structure of the island than had before been obtained. This is exclusively volcanic, and the rocks are either compact basalts, or conglomerates of basalt and tufa, although no active volcano exists, nor any well-defined crater, unless Lake Waiherea can be considered as one. Through these rocks olivine and pyroxene are copiously disseminated; cellular lava was found in some places, but neither pummice nor obsidian; quartz and mica were not observed, nor any carbonate of lime, except in the form of coral rock.

There is no conformity between the rocks of the centre of the island and those which in most places extend inwards for a few miles from the coast. The former are usually compact, of columnar structure, and exhibit no appearance of horizontal stratification; the latter lie in horizontal layers, composed of scoriaceous and vesicular lava. In both of these structures, singular twistings and contortions were observed. Many dikes were seen to occur, not only in the mountains, but near the sea-coast; these were from three to six feet in width.

All the rocks of the island appear to be undergoing rapid decomposition. Even in places where the rock seemed to have retained its original form of sharp edges and pointed pinnacles, it was found so soft, to the depth of a foot or more, as to crumble in the hand. The earth thus formed varies in colour from that of Indian red to a light ochrey tint; in consequence, many of the hills are of a red hue, and one immediately behind Papieti, takes its name (Red Hill) from this appearance.

This decomposed earthy matter, mixed with the abundant decayed vegetation of a tropical climate, forms, as may be readily imagined, a soil of the greatest fertility, adapted to every kind of cultivation. On the higher grounds, the soil thus constituted has the character of a clay, and is in wet weather slippery and unctuous; in lower positions it is mixed with lime derived from coral and shells, which often tends to augment its fertility.

Iron abounds throughout; on the mountains to such an extent that compasses were found of little use from the local attraction by which they were affected; and on the shore, the sand was composed in part of iron, which could be separated by the magnet.

Water gushes out near the coast in copious springs, but none of them were found hot, nor were any warm springs reported to exist.

Papieti, in whose harbour we were now lying, is one of the largest villages on the island; being the ordinary residence of the queen, and the abode of the foreign consuls. The foreign residents are also, for the most part, collected here. Among all its dwellings, the royal

residence, and the house of Mr. Pritchard, are the only ones which possess the luxury of glazed windows. The houses of the foreigners are scattered along the beach, or built immediately behind it.

The bay of Papieti is the safest, and its port affords the greatest facilities for the repair and supply of vessels, of any belonging to the island. For the first purpose a wharf and warehouse have been constructed, which are let to those who wish to use them. We occupied them for ten days, for which we paid thirty dollars. The tender was hove out at the wharf, and her equipment secured in the warehouse. A limited supply of ships' stores and chandlery is kept for sale, and may also be purchased from the vessels which frequent the port.

The greater part of the commercial business of Tahiti is transacted here, whither the articles for export from other parts of the island are brought to be re-shipped. The number of vessels which visit this port annually, is about sixty, of which the largest portion are whalers; the remainder are transient merchantmen, or regular traders from New South Wales. The latter bring cotton fabrics, which they exchange for sugar, molasses, arrow-root, and cocoa-nut oil. The value of the exports in this direction is supposed to be about $35,000.

The amount of American manufactured goods imported into the island is estimated at an equal sum; they find their way here in transient ships from the coast of South America, and the supplies furnished our whale-ships are generally paid in American goods.

It is almost impossible, in the absence of all statistics, to arrive at any correct statement of the amount of foreign manufactures annually consumed here; but the quantity is evidently on the increase.

By a regulation of the colonial government of New South Wales, Tahitian vessels are allowed to enter their ports on the same footing with the English. There are several vessels engaged in the trade, and others building.

The position of this island, in the vicinity of the cruising-ground of our whale-ships, and the resources it possesses for supplying shipping, make it a desirable point of rendezvous.

The following statement will show the number and value of American vessels visiting this island in the years 1836, '37, and '38.

	WHALE-SHIPS.	TONN.	VALUE OF CARGO.
1836	52	18,090	$1,307,500
1837	57	20,500	1,817,000
1838	42	15,000	1,268,000
	9 merchant-ships	1,700	75,000
		55,290	$4,467,500

A census recently taken, gives for the population of Tahiti nine

thousand, and for that of Eimeo one thousand. When this is compared with the estimates of the navigators who first visited these islands, an enormous decrease would appear to have taken place. The first estimates were, however, based on erroneous data, and were unquestionably far too high; yet there is no doubt that the population has fallen off considerably in the interval. The decrease may be ascribed in part to the remains of the old custom of infanticide, in part to new diseases introduced from abroad, and the evils entailed upon them by foreigners, and in part to the transition now going on from a savage to a civilized life.

Whatever may have been the case, during the first years after it was visited by Europeans, the population for the last thirty years has been nearly stationary; the births and deaths are now almost exactly in equal numbers. One of the oldest of the missionaries informed me, that although he saw much change in the character and habits of the people, he could perceive none in their apparent numbers.

Tahiti does not appear to be afflicted by many diseases. Some have been introduced by foreign ships, and among others, the venereal, from which the natives suffer much, being in possession of no method of arresting its ravages, and ignorant of the proper mode of treating it. In connexion with this subject, the want of a physician as a part of the missionary establishment, struck me as an instance of neglect in its managers; and I was surprised to hear that the London Society did not employ any medical men. From this cause, not only are the natives deprived of the benefits which might so easily have been conferred upon them, but the missionaries themselves are compelled to pay, out of their private purses, for medical aid, when it can be procured. They are even at times wholly without a physician. This happened to be the case at the time of our arrival, when a medical practitioner who had formerly resided on the island, had just taken his departure.

The effects of intoxication from ardent spirits and ava are said to have swept off many of the inhabitants. Secondary syphilis is in some cases severe, but their usual vegetable diet and simple mode of living, together with frequent abluuions, tend to mitigate this disease. Its continued prevalence, as well as the severity of some of the cases, are ascribable to the inordinate use of mercury, administered by a physician who was accustomed to distribute it in inordinate quantities among the affected, who were of course ignorant of its nature and consequences.

While lying at Papieti, we had an opportunity of seeing the manner in which justice is administered in criminal cases. The court was

held in the council-house, an oblong building, in the native style; the alleged crime was assault with intention of rape. The judges were seated on mats, having Paofai, their chief, a little in front of the rest; and the audience sat or stood around. The culprit was a petty chief, called Ta-ma-hau, a man of huge size, and apparently somewhat of a bully; he stood during the trial leaning against one end of the house, with an air of cool indifference. His accuser was a damsel not remarkable for personal beauty; she sat near the door among a number of other women. The witnesses were patiently heard, and the matter argued, after which the six judges severally gave their opinions and made remarks on the evidence, to which Paofai listened in an attentive and dignified manner, expressing, as occasion demanded, his assent or dissent. He then pronounced the verdict of the court, by which the prisoner was acquitted, but did not dismiss him without a brief and merited admonition. It appeared, that although not guilty of the crime alleged, he had while intoxicated addressed indecent language to his accuser.

Cultivation has undergone a great change within a few years, from the introduction of the guava, which has overrun the lower plain; the pasturage has not only suffered, but to its destructive effects are attributed many evils. Ten years prior to our visit, about which time the guava was introduced by the missionaries, the plain, from the sea to the base of the hills, was covered with verdure; and now it is overrun with an almost impenetrable thicket, before which all other vegetation disappears. I am inclined to think, that although this tree is now looked upon by the natives as a great curse, it will in time be beneficial to them, and cause them to become industrious, when they are obliged to get rid of it to make room for their sugar-cane, cotton, and indigo plantations; which products succeed remarkably well, can be raised at small cost, and will before many years be in great demand.

The cocoa-nut trees were also reported to have been decreasing, but our inquiries did not confirm this statement.

The manner of ascending the trees by the natives, has been frequently described, but can scarcely be imagined until witnessed; the feat is performed by leaping without any cessation, even in climbing the highest tree; the body of the tree being rough or composed of rings, affords some hold for the thong which spans the tree between the feet; at every jump, the body is thrown entirely free from the tree.

The bread-fruit tree is also said to have decreased, and this is no doubt the case; the seeds are said to be often abortive at Tahiti, for which reason the cultivation in this way has been neglected of late, and the plants raised in other modes have become less productive in conse-

quence; its timber is used for many purposes; the fruit was not in season while we were at Tahiti.

Wild sugar-cane was found in the interior, commonly growing in tufts, but so small in size that it was with difficulty recognised; the cultivated kind is derived from this, and is also of small size.

The fruits we met with were oranges, lemons, limes, shaddocks, pine-apples, papayas, bananas, figs, vi-apple, fahies, cocoa-nut, and bread-fruit; the six first mentioned have been introduced since Cook's time.

The vegetables are sweet-potatoes (Convolvulus), yams of small size, taro (Caladium esculentum), the ape (Caladium macrorhizon), turnips, onions, and leeks; but there were no common potatoes cultivated. I gave Mr. Wilson some of the yellow Peruvian potato (Papas amarillas), but he informed me that all their attempts to raise potatoes in the low ground had failed.

The tacca, from which arrow-root is manufactured, grows in quantities, but we did not see it cultivated.

In the botanical researches it was remarkable that not a single stem of paper mulberry (Broussonetia) was found, although former visiters speak of it as the tree from which their cloth was made.

There are a vast variety of ornamental shrubs, and many aromatic plants, which the natives use to perfume their cocoa-nut oil.

The tutui tree (Aleurites triloba), the nut of which is used in tattooing, is very common all over the island.

Tobacco is grown in small quantities.

Mr. Henry informed me that grapes succeeded well on the south-east side of the island.

The price of labour is from two to four dollars a month, but for occasional labour fifty cents a day is usually paid.

Wild hogs are said to be numerous in the mountain region; none of our parties, however, met any. Horses are possessed by many persons on the island, and goats were seen. Dogs and cats were abundant. The island is well supplied with cattle; they are suffered to run wild, and frequent the neighbourhood of the hills, whither they are obliged to go for pasturage, which is now very scarce on the island, on account of the thick growth of the guava.

After the departure of the Vincennes, a party from the Peacock, consisting of Mr. Dana and some others, obtained leave of absence from Captain Hudson for five days, with the design of ascending Mount Aorai. They commenced the ascent immediately in the rear of Papieti, and by noon on the second day had reached an elevation of

five thousand feet, where they stood upon a platform about twelve feet square; thence they looked down eastward two thousand feet into the Matavai Valley; to the westward they had a gorge about a thousand feet deep running into Toanoa Valley; to the south, the platform on which they stood was united by a narrow ridge with Mount Aorai, which was apparently only a short distance before them. In this place they were compelled to pass the night, by a fog which enveloped them, through which the guides were unwilling to lead them, refusing to proceed further along the dangerous path until the clouds should clear away.

The next morning was clear, and they pursued their ascending route along the edge of a ridge not more than two or three feet in width, having on each side an abyss two thousand feet deep. Seen from this ridge, looking south, Mount Aorai seemed a conical peak, but as it was approached it proved to be a mountain wall, whose edge was turned towards them. The only ascent was by a similar narrow path between precipices, and surpassed in steepness those they had already passed. The width of the crest seldom exceeded two feet, and in some cases they sat upon it as if on horseback, or were compelled to creep along it upon their hands and knees, clinging to the bushes. At last they reached the summit, where they found barely room to turn around. The ridge continued for only a short distance beyond them, being then cut across by the Punaania Valley.

From the summit of Aorai they had a magnificent view; to the south, it was speedily bounded by the peaks of Orohena and Pitohiti, whose steep sides rose from the valley beneath them; to the east, they had the rapid succession of ridge and gorge which characterizes Tahitian scenery; to the west, over a similar series of jagged ridges, Eimeo and Tetuaroa stood out from the horizon of the sea in bold relief; to the north, they looked down upon the plain, studded with groves of cocoa-nut and orange, and upon the harbour with its shipping, and the encircling reefs of coral.

A short distance below the summit of Mount Aorai, a mass of turrets and pinnacles, which from its singular outline is called the crown, runs along the top of a narrow ledge.

Except the plain of the coast, no level land is in sight but the valley of Punaania; this is divided from that of Matavai by a ridge of the usual edge-like form, running upwards towards Orohena.

Very few of the natives who are now alive have been on the summit of Aorai; their paths in this direction, as in other places, do not lead beyond the limit of the groves of wild banana (fahie). Beyond the

height at which these cease to grow, the ground is chiefly covered with a wiry grass (Gleichenia), which springs up in many places to the height of ten feet, and is every where almost impenetrable. When this was not too high, they broke it down by casting their bodies at full length upon it; and when of larger growth, they had recourse to cutting away or breaking its stiff and crowded stems, until they had formed a way beneath it, whence the light was almost excluded.

The want of water, which after a few days of dry weather is seldom found even in the elevated valleys, was an additional discomfort. It is to be recommended to future travellers in the mountains of Tahiti to make provision against this inconvenience. The party was so much distressed from this cause as to enjoy the dew upon the leaves as a luxury.

Mr. Dana reported that the visit to Aorai conclusively settled one questionable point in the geology of the island. He found upon its summit neither corals nor "screw-shells," which vague rumours have long located on the top of the Tahitian mountains. Every one who has visited this island has probably heard that such formations exist in these lofty positions; but the report rests wholly on native authority. Moera, the guide who accompanied the party, and who resides near One-Tree Hill, insisted that he had seen both, and promised to show them. On reaching the summit, he began digging, and the rest of the party aided him. He soon brought up what he called coral, but which proved to be a grayish trachytic rock; and, although he continued to dig for some time longer, he could find nothing which he could venture to exhibit as screw-shells.

In their descent from Mount Aorai they followed the western side of the valley of Papoa, along a narrow ledge, similar to that by which they had ascended. After proceeding for two hours they reached a small plain, which speedily narrowed to a mere edge of naked rock, with a steep inclination; this they were compelled to traverse on their hands and knees, taking the greatest care to avoid detaching the rock, which in many places overhung a precipice; next followed a perpendicular descent of about twenty-five feet, down which they let themselves by ropes; this difficulty overcome, the rest of the route presented no dangerous features, and was performed in safety.

The manufactures of Tahiti are of little amount. Among them is that of arrow-root from the Tacca pinnatifida, which employs a portion of the population. Cocoa-nut oil is also made, and preserved for use in pieces of bamboo, cut off at the joints, when the natural diaphragms form a bottom, and the piece is thus a convenient bucket.

This oil is often scented with aromatic herbs, to be employed by the natives in anointing the hair and body; it is also used for burning in lamps, and is exported in considerable quantities. The lamps, which are always kept burning in their houses at night, are made of the shell of a cocoa-nut. The wick is formed of wild cotton, and is kept upright in the centre of the bowl by two elastic strips of cocoa-nut leaf crossing each other at right angles.

Sugar is beginning to attract attention, and some attempts have also been made in the culture and preparation of indigo.

Making straw or chip hats is a favourite occupation among the women, whose former employment of making tapa has, as was stated in the preceding chapter, been much diminished by the introduction of European fashions.

I have also before referred to the abortive attempt of the missionaries to introduce machinery for the manufacture of cotton, which will be again mentioned in speaking of the island of Eimeo, where the experiment was made.

Before closing my remarks on Tahiti, I consider it my duty to say a few words in relation to the transgression of the local laws by many of the vessels which visit it, and some of which, I regret to be compelled to confess, bear the flag of the United States. I have particular reference to the license always allowed to the crews, and in which the masters and officers often themselves indulge, in making brothels of their ships. They also do not scruple to retail ardent spirits to the natives, although they well know that it is contrary to a law of the island, most strictly enforced on shore. Such conduct not unfrequently gives rise to difficulties very prejudicial to the interests of the owners; but it is still more disgraceful when considered in its destructive effect upon the people whose hospitality they are enjoying, and as a practice that they would not dare to indulge in, when in the ports of any civilized nation.

The influence of the example of these visiters upon the natives is demoralizing in the extreme, is calculated to retard their advancement in civilization, and throws countless difficulties and obstructions in the way of the laudable exertions of the missionaries.

Little idea can be formed by those who have not witnessed it, of the extent to which the practice of vending spirits is carried, not only at Tahiti, but throughout the Polynesian islands. I am satisfied, that if the owners of the vessels which indulge in it were aware of the traffic, and had a just sense of their own interest, they would interdict the sale of this pernicious article, and prohibit the carriage of it in their ships.

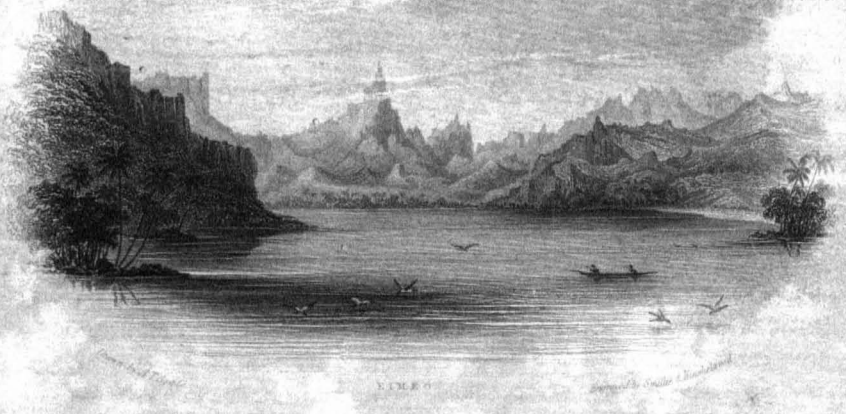
Captain Hudson, who was much troubled with the illicit supply of spirits to his men, and was aware of the fact that the practice of vending it was contrary to law, endeavoured to discover the parties engaged in this traffic. He did this not only for the sake of his own crew, who, when questioned, stated that their intoxication was produced by gin, bought at the rate of three dollars a bottle, but to aid the natives in their exertions to prevent the infraction of their laws by the white residents. In pursuance of these objects, he called a meeting of the chiefs, and stated his complaint. They forthwith ordered search to be made for the offenders by the police, by which some of them were discovered and immediately fined. At the examination, however, the chiefs stated to Captain Hudson, with what truth I do not pretend to say, that seventy cases of *gin* had been landed by our own consul, from whom they believed that the retailers had obtained it, while the main stock being upon his premises, under the United States flag, was protected from search.

The repairs of the Flying-Fish were not completed before the 10th October, up to which time the Peacock was detained, not only in order that they might sail in company, but because her officers were still engaged in the survey of the harbours. In the interval of leisure which was thus afforded them, the crew of the Peacock asked and obtained permission to get up a theatrical entertainment, for the amusement of the natives and themselves. The council-house was placed at their disposal for the purpose by the native authorities. The play chosen was Schiller's "Robbers," the parts of which had been rehearsed at sea, in the afternoons—a task which had been the source of much amusement. An opportunity was now presented of getting it up well: the dresses having been prepared, the day was appointed, and when it arrived the piece was performed; the acting was thought by the officers very tolerable, and finally gave great delight to the natives. The latter, however, were somewhat disappointed in the early parts of the performance, for they had expected an exhibition of juggling, such as had been given for their entertainment on board of a French frigate. While under this feeling, they were heard to say there was too much "parau" (talk). After they began to enter into the spirit of the performance, the murders took their fancy; and they were diverted with the male representatives of the female characters.

A number of comic songs, which formed the relief of the more serious play, were exceedingly applauded; among others they laughed heartily at "Jim Crow" sung in character, and could not be persuaded that it was a fictitious character.

On the 25th September, the Vincennes sailed from the port of Papieti for the island of Eimeo. The distance between its reef and that of Tahiti, measured by the patent log, is ten miles.

Eimeo is a beautiful object in the view from Tahiti, and its beauty is enhanced on a nearer approach; its hills and mountains may, without any great stretch of the imagination, be converted into battlements, spires, and towers, rising one above the other; their gray sides are clothed here and there with verdure, which at a distance resembles ivy of the richest hue.



Taloo harbour is an inlet about three miles in depth, situated in a glen enclosed by precipitous sides rising in places to the height of two thousand feet; at its head is an extensive flat of rich alluvial soil, now employed in the culture of sugar, and studded with trees, shrubs, and other interesting objects. The ship lay at anchor close beneath a high mountain on the left, in contrast with which her dimensions seemed those of a cock-boat.

I had been furnished with letters to the Rev. Mr. Simpson, who is stationed as missionary at Eimeo; when we landed, he met us upon the beach, and gave us a most cordial reception; we were soon surrounded by nearly all the natives in the place, male and female, old and young, who followed us with expressions of wonder; their conduct reminded me of the manner in which an Indian chief is run after in the streets of our American cities. In spite of their excite-

ment they were all extremely civil, and said they only wished to look at us, although some were disposed to feel us.

Mr. Simpson led the way to his house, passing by a thick and well-built stone wall, the only one which I had seen used as an enclosure in these islands; on my inquiring if it was the work of native labour, I was informed that it had been erected by an Irishman, who is now the overseer of Mr. Simpson's sugar plantation. This wall encloses a large lawn, with a number of fine bread-fruit trees; on each side of the walk was a row of low acacias, which were at the time in full bloom, with flowers of many colours,—yellow, orange, red, and variegated; at the end of the walk was a low thatched white cottage.

Mr. and Mrs. Simpson have the care of a school for the children of missionaries and respectable white parents: these are kept entirely separate from the children of the natives; the reason assigned for this exclusiveness is, that the danger of the former receiving improper ideas is such as to preclude their association with the latter. This may be good policy as far as the white children are concerned, although I doubt its having a good effect on their minds if they are destined to spend their lives among the islands. The habit they will thus acquire of looking upon the natives as their inferiors, cannot fail to have an injurious influence on both. The exclusiveness is carried so far, that the children of whites by native women, although they are united in the relation of husband and wife, are not admitted into these schools, because, as they say, they do not wish their children to be contaminated by intercourse with such a mixture of blood. In pursuance of the same policy they have, as it is said, procured the enactment of a law prohibiting marriage between whites and the natives.

This, I must say, appeared to me the worst feature I had seen in the missionary establishment. It is placed here for the avowed purpose of reclaiming the natives from idolatry, and the vices which are its concomitants. In doing this, their most successful efforts have been in the conversion and moral improvement of the young; yet they bring up their own children to look down upon them as beings of an inferior order. In becoming acquainted with this feature, I no longer wondered at the character, which I was compelled by a regard for truth to give, of the children of missionary parents in Tahiti.

The missionaries are now aware that their proper plan is to devote their time and attention to the young; and in pursuance of this object, Mr. and Mrs. Howe have lately arrived from England, for the purpose of establishing an infant school.

It is to be regretted that the schools of manual labour have, for what reason I could not learn, been discontinued. Some of the natives who had been instructed in them evinced a knowledge of the trade of the carpenter, and furnished the ships with very good boards sawn by themselves.

The natives of Eimeo have an advantage over those of Tahiti in being free from the influence of evil example; many of them are industrious, and possess a proper feeling of the benefits they have derived from the missionaries, of whom they speak, whenever questioned, as friends.

Three of our crew having become enamoured of these islands, deserted while the Vincennes lay at Eimeo. They left the ship about ten o'clock at night, soon after which their absence was discovered, and parties sent out in every direction to intersect the roads and drive them to the hills. This was effected the following morning, and a large party of natives was employed to hunt them up. This task they speedily performed, and at last drove the deserters to one of the highest ridges, in full view of the ship. Here the runaways appeared at first disposed to make fight with stones; but when they saw the odds against them, and witnessed the alertness of the natives in leaping from cliff to cliff, they thought it best to give themselves up; which they did to three natives, naked except the maro, and armed respectively with a rusty sword, an old cutlass, and a piece of iron hoop. These bound their hands, and led them down to the shore, whence they were brought on board, where the three natives received the reward offered for their apprehension. The chase and capture was an amusing sight to those who watched the proceedings from the ship.

Eimeo has, if possible, a more broken surface than Tahiti, and is more thrown up into separate peaks; its scenery is wild even in comparison with that of Tahiti, and particularly upon the shores, where the mountains rise precipitously from the water, to the height of twenty-five hundred feet. The reef which surrounds the island is similar to that of Tahiti, and as we have seen to be the case there, no soundings are found on the outside of it. Black cellular lava abounds, and holes are found in its shattered ridges, among which is the noted one through which the god Oroo is said to have thrown his spear.

While we remained at Eimeo, I visited Papoa or Cook's Harbour, which lies to the east of that of Taloo. There is a marked resemblance between the two ports, except that the shores of Papoa are not quite as precipitous as those of Taloo, and the entrance of the former not as practicable.

Wood and water may be had at both harbours in abundance, but in other respects the island is not well adapted as a place for the supply of ships. No more than a single ship would probably be able to find refreshments at a time. It is, therefore, seldom visited, and its surplus produce is carried to Tahiti for sale. Notwithstanding, the articles of traffic are quite as dear as at Tahiti.

The inhabitants of Eimeo reside upon the shores, and there are several large villages on the southern side of the island; among these is Afareaitu, at which the Rev. Mr. Hale, whose recent arrival has been spoken of, is about to take up his residence.

It was in this island that the establishment of a factory for spinning cotton, and weaving cloth and carpets, was attempted by Messrs. Armitage and Blossom, who were sent out for the purpose by the London Missionary Society. Its failure and cessation after a fair trial have already been mentioned.

It has been seen that the alluvial plain at the head of the harbour of Taloo, is partly occupied by plantations of sugar. The cane is of superior quality, and the climate well adapted to its production; the plant is indeed indigenous, and it is well known that the variety of it found at Tahiti has been introduced advantageously into the West Indies. At Eimeo the crop is liable to injury from the ground-rat, and there are difficulties attending the management of the crop, which cause the cultivators to speak despondingly. About one hundred tons, however, are made annually.

Coffee, cotton, and all other tropical plants, succeed well at Eimeo, and the quantity of tapa manufactured is greater in proportion than at Tahiti.

I took the opportunity of my anchorage in the harbour of Eimeo, to verify the chart made by Captain Von Schantz, of the Russian ship America, and found it accurate. I have added some soundings, and laid down the topography of the shores, and the outline of the reefs, more minutely than he had attempted.

On leaving Eimeo, I bade adieu to the Tahitian islands; but I cannot close the portion of the Narrative which is devoted to them, without again expressing the pleasure I and all my officers derived from our intercourse with the missionaries, and our obligations for the kindness received from them and other residents. Among those to whom we are indebted, I cannot refrain from naming George Pritchard, Esq., H. B. M. Consul, of whose strenuous exertions to advance the welfare of the people, and sustain the government in its efforts to promote their best interests, I became by observation fully aware. It is to be regretted

that his very activity in thus labouring in many ways for the good of the community in which he resides, should be the probable cause of unkind and unfounded imputations, from those actuated, if not by motives positively bad, at least by a less enlightened or less ardent zeal.

BEATING TAPA.

CHAPTER III.

CONTENTS.

DEPARTURE OF THE VINCENNES FROM TAHITI—BELLINGHAUSEN'S ISLAND—ROSE ISLAND—MANUA—ITS DESCRIPTION—THREATENED WAR—ITS CAUSE—CANOES OF MANUA—APPEARANCE AND CONDUCT OF THE NATIVES—VILLAGE—DRESS OF THE NATIVES—PRODUCTIONS OF MANUA—OLOOSINGA—ITS DESCRIPTION—HOUSE OF THE KING—HIS ENTERTAINMENT—RETURN TO THE SHIP—CORAL REEF OF OLOOSINGA—OFOO—TEMPERATURE DURING THE PASSAGE—PLAN OF THE OPERATIONS OF THE SQUADRON—APPEARANCE OF TUTUILA—HARBOUR OF PAGO-PAGO—ANCHORAGE—TOA—OBSERVATORY—GEOLOGICAL STRUCTURE OF TUTUILA—APPEARANCE AND CHARACTER OF ITS INHABITANTS—MASSACRE OF M. DE LANGLE—VILLAGE OF PAGO-PAGO—GOVERNMENT—WAR-MATS—VISIT TO TOA—HIS FEAST—PRICE OF PROVISIONS—WAR-SONG—BATHING—MODE OF LIVING—EMPLOYMENTS AND AMUSEMENTS—MR. MURRAY, THE MISSIONARY—CUSTOMS OF THE NATIVES—PUBLIC WORSHIP—MISSIONARY—JUNCTION OF THE PEACOCK AND FLYING-FISH—SURVEYS—CLIMATE—VISIT TO HEATHEN VILLAGES—SAVAGE FEAST—TEMPERATURE AT THE TOP OF MATAFOA—SUPPOSED MURDER—REMARKABLE PHENOMENA OF THE TIDES.

SAMOAN
OR
NAVIGATOR ISLANDS
BY THE
U.S.Ex.Ex.
1839.

ROSE I.

CHAPTER III.

TUTUILA.

1839.

On the 29th of September, at daylight, having the wind from the northward and eastward, we got under way, and made sail to the westward, passing the Society Island Group: viz., Sir Charles Saunders' Isle, Huaheine, Tahaa, Borabora, Maufili, and Moutoiti. All of these, with the exception of the last, are high lands.

On the 30th, we made Bellinghausen's Island, which is a low coral island, similar to those which have been already described. It was uninhabited, and is of a triangular form, with the usual vegetation, with the exception of cocoa-nut palms. We landed upon it, and made the magnetic experiments.

Birds were in great plenty, and as tame as we had found them at other uninhabited islands we had visited. No lizards or rats were observed, nor was the common fly seen. The lagoon had no passage into it at low water, but the tide flowed into it over the reef.

During the time of our stay on the island, the tide rose and fell upwards of two feet, and it was high water at 8 A. M. Many specimens of fish were obtained here, of which the department of Natural History will treat.

In the afternoon, we again made sail to the westward, for Rose Island, and on the 6th of October, we passed near the locality of the Royal George Shoal, but saw nothing of it.

On the 7th, which was the day appointed for our rendezvous off Rose Island, we came in sight of it, and at the same time descried the Porpoise. That vessel had passed by Nairsa or Dean's Island, and connected the survey of it with that of Krusenstern's and Lazareff. Both of these were found to have entrances into their lagoons; they

are uninhabited, though occasionally visited by the natives of Nairsa Island. The position of Recreation Island was passed over, but no signs of land discovered.

Rose Island, the most eastern of the Samoan Group, was discovered by Freycinet, who gave it its name. It appears, at first, like a round knoll of land, but on a nearer approach, this is found to arise from a large clump of Pisonia trees, similar to those found growing in the low archipelago. It is a low annular coral island, of small dimensions, inundated at high water, with the exception of two small banks, one of which is entirely covered by the clump of trees. The other is formed of dead coral, without any vegetation. The tide was found here to rise about four and a half feet, the flood setting to the eastward. The breakers on its weather or southeast side are heavy; and there is an entrance into the lagoon, having four fathoms depth of water through it. The lagoon has from six to twelve fathoms in it. A remarkable coral formation, like a submerged tree, thirty feet in diameter over its top, was found in the centre of the lagoon, rising to the level of low water, and having all around it a depth of six fathoms. The currents set regularly out and in to the lagoon, according to the state of the tide. In stormy weather the sea must make a complete breach over the reef.

Some boulders of vesicular lava were seen on the coral reef; they were from twenty to two hundred pounds weight, and were found among blocks of coral conglomerate.

Birds were seen flying over the island, and on landing we found them in great numbers and very tame. The frigate-birds, and boobies (sula), whose nests had before been observed on low bushes, were here found on the tops of trees fifty feet high. The noddies laid their eggs on the parts of the island destitute of vegetation. Tern were in great numbers; their breeding-place was in a thicket on the weather side of the island, or that which was exposed to the wind and sea, and was remarkable from the regularity with which the eggs were placed, about three feet apart, without any nest, and, with but few exceptions, out of many thousands, each egg lay separately. The colour of the eggs is a dirty white, mottled with brown. The noise made by these birds when disturbed was almost deafening; but on making a loud sound, such as the firing of a gun, their cries would cease for a moment or two, producing a singular stillness.

Several small turtles, similar to those seen at Honden Island, were observed here. One of them was taken, but its flesh proved coarse, and was drier than that of the green turtle: they feed upon a species of fucus that grows upon the reefs. Here we made observations for intensity and dip.

On the 7th, we left Rose Island and stood to the westward, making at sunrise the island of Manua, which is two thousand five hundred feet above the level of the sea. It has the form of a regular dome, rising in most places precipitously from the water to the height of three or four hundred feet, after which its ascent appears more gentle and even. It is sixteen miles in circumference, is well covered with a luxuriant vegetation, and has many cocoa-nut groves on its north-west side.

On approaching it, Oloosinga was in sight, and shortly after Ofoo. These two islands lie to the northwestward, at the distance of about four miles.

The boats were lowered, and sent to trace the shores of the island of Manua, for the purpose of surveying it; whilst the Vincennes and the Porpoise passed on each side.

This island is inhabited. The principal settlement is on the north-west side, and there is anchorage for a small vessel near the shore, where there is a cove to land in, with but little surf during the fine season, or from April to November. It has a shore-reef of coral, and the soundings extend off some distance, eight fathoms being found four hundred yards from the shore.

Some large blocks of vesicular lava were seen on its northeast point, but the general structure was a conglomerate of a drab colour, in horizontal strata; yet the beach was of light-coloured sand, formed by a mixture of coral and shells.

Our arrival off Manua was opportune. According to the statement of one of the brothers of the king, who spoke a little English, hostilities had been threatened between the "missionary" party, and the "devil's men." A native missionary, resident in the island, had already prevented a battle, by telling them that if they wished to fight with each other they must first kill him. Through his influence and exemplary conduct, peace had hitherto been preserved. It was stated that several "very bad" white men were on the island, and that they made "plenty of fight;" but that on seeing "mannawa" (man-of-war), they had gone into the "bush."

Eight of these men had deserted from an English whaler, whose boat they had stolen. Three of them came alongside of us next day, clad after the manner of the natives, and were very anxious to be taken off the island.

The canoes of these islanders were the best we had seen. They are built of a log, having upon it pieces fastened together, to raise them sufficiently high. They are thirty or forty feet long, and are

partly covered in at both ends. Some of them are capable of containing twenty or twenty-five men, and are very swift. The chief usually sits cross-legged on the forward platform or deck. They have an out-rigger, which is not so far removed from the canoe, and renders them more liable to be upset.

Several of the natives came on board. They were a finely-formed race, and appeared lively and well-disposed, though in a much wilder state than those of the Society Islands.

Our party, on landing, were immediately surrounded with natives willing to trade, and calling out for "bacca" (tobacco), which is in great request among them. Fish-hooks were also much sought for. A fowl, a bunch of bamboos, and a dozen of cocoa-nuts were procured for a small one.

They seemed willing to exchange any thing they had, viz., baskets, mats, spears, clubs, &c., to obtain these articles. They were not found altogether honest, though this did not consist in stealing, but in selling their articles twice over; for after we had made a purchase from one, another would claim the article as belonging to himself, and insist on also receiving a price for it.

Near the village are thick stone walls, intended to all appearances for defence. The houses are elliptical, supported on stout posts, about four feet high, from which the roof or thatching rises to the height of twelve or fifteen feet; they are generally erected on a raised terrace of stone, two feet above the ground. The floors are covered with coarse matting.

The king or chief of these islands resides at Oloosinga, in consequence of its being more easily defended.

The dress of the natives consists only of the maro, made of the leaves of the Dracæna, which has a graceful appearance. The leaves are slit, and form a kind of short petticoat.

The tattooing is of the same kind, as will be described in the general account of the Samoan Islands.

These islands furnish pigs, fowls, sweet-potatoes, fruit, and some taro. The vegetation was thought to be more luxuriant than at Tahiti, and the climate moister.

Many running streams were observed coursing down the sides of the island. When off the eastern end, we were much surprised to see the natives plunge off the rocks into the heavy surf to reach our boats.

After our party reached the ship, we made sail for Oloosinga, where I went on shore to see the king or chief, who was old and decrepit. His name is Lalelah. His brother, and presumptive successor,

was with him, and met me as I landed from the boat. His mode of salutation was by taking my hand and rubbing the back of it against his nose.

The old man, I was told by the interpreter, could speak a little English, but I could not understand him. This he attributed to his age, and would not admit that it was owing to his ignorance of the language. They led the way to his hut, situated under a mural precipice twelve hundred feet in height.

The island of Oloosinga is a narrow ledge of rocks, rising nearly perpendicular on both sides, and is three miles in length. So precipitous is it at its ends, that it is impossible to pass around it on the rocks. The strip of land is about five hundred yards in width, on which bread-fruits and cocoa-nuts grow in great profusion and sufficient abundance for all the wants of the natives. They told me that this island had been chosen as a place of safety, since the other became unsettled in consequence of the wars of the Christian and Devil's parties; and that the island of Manua had formerly been the residence of the king, but that he found himself unsafe there, and had taken up his abode at Oloosinga, on its northwestern side.

His house was elliptical in form, and thirty feet long, erected on a well-flagged terrace of stone, about four feet above the ground. It was well shaded with cocoa-nut and bread-fruit trees, and was supported around by ten stout posts, with three others in the centre reaching the top. The roof came down within three and a half feet of the ground, and projected as eaves about eighteen inches or two feet. In the centre the hut was fifteen feet high and well thatched.

The whole floor was ordered to be spread with fine mats, which were carefully unrolled, and laid over the coarser ones on the floor. The king then seated himself in the centre, and desired me to take a seat between himself and brother. Shortly afterwards two large wooden trays were brought in, filled with cooked bread-fruit and covered over with leaves. One of these was placed before me, when the king made a long speech, giving me welcome and offering food to eat. I was then desired to hand some to the king and his brother, and to others who were pointed out to me. This I did, but unfortunately continued my task, and handed it to one of the Kanakas, or common people, who were sitting close around us; much displeasure was evinced, accompanied with angry looks. I now looked around for my men, but they were out of sight, on their return to the boat. In order to make the best of my situation, I asked what was meant, and feigned to be quite ignorant of having given any offence. After a

minute they were apparently appeased, and pleasant looks were restored.

They handed round a shell containing cocoanut-oil to dip the bread-fruit in, and another containing salt water. After we had eaten, they began a careful examination of my clothes, and appeared much pleased with the buttons. My pocket-handkerchief was taken out of my pocket, and spread on the mat to be examined by the king. His brother took off my hat and put it on the top of his large bushy head. They then had ava made, of which I could not partake, after seeing the process of making it. It is first chewed by the women and thrown into a large bowl; water is added to it, and it is then strained through leaves. This was partaken of by them all, while they gave me a fresh cocoa-nut.

They were becoming more familiar every moment, and it was getting late, so I thought it time to make a move. I therefore rose up, and was followed by the natives, in number upwards of a hundred, including the king and his brother, to the boat. I looked carefully around for arms, but saw none among them. My boat was aground: the king, his brother, and several others, got into it, saying they must have some presents. They seemed disposed to resist, and showed a determination to contest our getting off. I on the other hand was determined to get rid of them, and peaceably if I could; I therefore ordered the boat's crew to arm themselves, and drive every one of the natives from the boat, at the same time intimating to the king to use his authority, which I found, however, existed only in name. We thus succeeded in getting clear of the crowd, until we had no more than eight left; to each of these I presented a small fish-hook, and ordered them to get into the water, which was about a foot deep, and go; this they did, one by one. At last came the king and his brother's turn, to whom I presented, with great ceremony, first a small and then a large fish-hook; after which they left me, apparently in great good humour. I was heartily glad to be rid of such rapacious troublesome fellows so easily and without a fight. We then pushed our boat off. When just beyond the reef, in taking up our anchor, the boat had the appearance of returning again on shore. On seeing this, a great shout was set up by the natives, and one of them immediately advanced with my powder-flask. He said it had been taken by a boy out of the boat, and had been dropped into the water, to be picked up after we had shoved off. I gave the man a small present for his apparent honesty; but I am inclined to believe it was the fear of detection, and the belief that we had missed the article, and were returning for it, that induced them

to give it up so willingly. It was some time before he could be made to understand what the reward was for, but when he found it was for his honesty, he laughed heartily.

This having excited our suspicions, the boat's crew informed me that a canoe that was paddling off had been alongside of the gig, and that they felt satisfied that the natives had taken something from us. It being in our course towards the ship, we gave chase, and being favoured by the wind, soon overtook the canoe, to the great fright of the two natives, who were paddling with all their might, and whose eyes were full of tears when overtaken. They had nothing at all in their canoe, and after examination it proved we had lost nothing. To console them for this alarm, I gave them a few trifles, and they became easy and cheerful.

The coral reef around this island was different from any I had hitherto seen. It consisted of two regular shelves, the outer one from fifty to sixty feet wide, and the inner in places measuring one hundred and forty feet. A distinct mark of high water was measured along the beach, and found to be twenty feet above the ordinary sea-tide, which has from four to five feet rise.

The rock at Manua was volcanic conglomerate, with large blocks of vesicular lava lying loose on the coral beach.

Before sunset the boats returned to the ship, having completed the survey of both islands.

Ofoo lies to the westward of Oloosinga. There is a passage for boats of about a fourth of a mile in width between them, and anchorage on the western side. Ofoo resembles Oloosinga; and, from the accounts we received, it has but few inhabitants: those of Oloosinga having made war upon them, and killed the "natives" off. There is a small and comparatively low islet off its western end, near which there is an anchorage. After sunset we bore away for Tutuila, which can be seen in fine weather from these islands.

The temperature in the passage from Tahiti to the Samoan Islands had increased from 77·6° to 81·11° in the air; and that of the water from 79·6° to 81·6°.

As it was my intention to make a thorough examination of this group, I resolved, in order to accomplish it in the least possible time, to divide the squadron, so as to put all the remaining islands under examination at the same time. The island of Tutuila being the most central, and, from the information I had obtained, the best position for my astronomical observations, I selected it for the Vincennes. That of Upolu was reserved for the Peacock and Flying-Fish when they should arrive; and in case of their being detained longer than I anti-

cipated, I should be ready to take up the survey of the latter, or assist in completing it. The Porpoise was ordered to examine the island of Savaii; and one of the naturalists, Dr. Pickering, was directed to join her, for the purpose of exploring the interior of the island during her operations in its vicinity. Lieutenant-Commandant Ringgold was therefore directed to land him for the purpose, and take him on board when the survey should be concluded.*

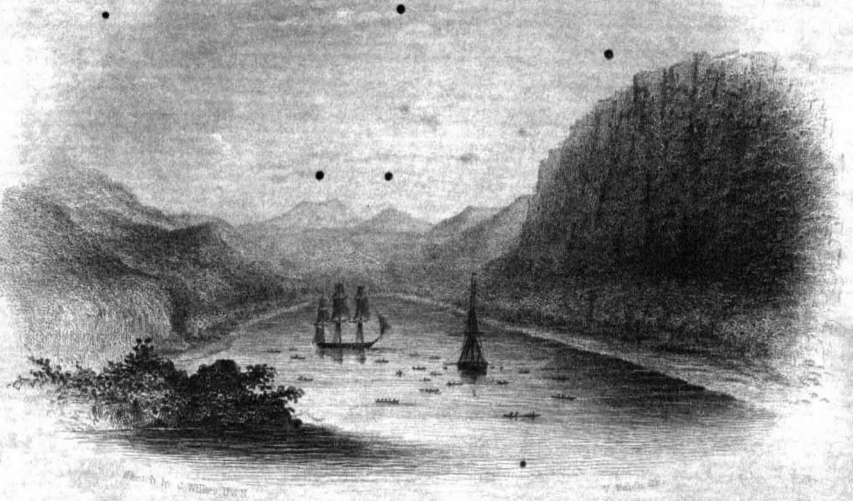
On the 10th of October, we had light winds, in consequence of which we did not reach Tutuila that day. At daylight on the 11th we were near its eastern end, and off the island of Anuu.

About eight miles to windward of the harbour of Pago-pago, we were boarded by several canoes, in which were some natives, with a white man, by name William Gray, whom I retained as interpreter during our stay here, and found of much use.

The island of Tutuila is high, broken, and of volcanic appearance. It is seventeen miles long, and its greatest width is five miles. The harbour of Pago-pago penetrates into the centre, and almost divides the island into two parts. It is less varied in surface than the Society Islands; and its highest peak, that of Matafoa, was found to be two thousand three hundred and twenty-seven feet above the sea. The spurs and ridges that form the high land are like those of Tahiti: precipitous, sharp-edged, and frequently rise in mural walls from the water to a height of three or four hundred feet, showing the bare basaltic rock. Above this height, the surface is covered with a luxuriant vegetation to the very top of the mountains; the cocoa-nut tree and tree-fern give the principal character to this beautiful scenery. Dead coral is seen along the shores, above high-water mark.

The harbour of Pago-pago is one of the most singular in all the Polynesian isles. It is the last point at which one would look for a place of shelter: the coast near it is peculiarly rugged, and has no appearance of indentations, and the entrance being narrow, is not easily observed. Its shape has been compared to a variety of articles: that which it most nearly resembles is a retort. It is surrounded on all sides by inaccessible mural precipices, from eight hundred to one thousand feet in height. The lower parts of these rocks are bare, but they are clothed above with luxuriant vegetation. So impassable did the rocky barrier appear in all but two places, that the harbour was likened to the valley of Rasselas changed into a lake. The two breaks in the precipice are at the head of the harbour and at the Pilot's Cove. The harbour is of easy access, and its entrance, which is about a third of a mile in width, is well marked by the Tower Rock and Devil's Point.

* For orders, see Appendix V.



HARBOUR OF PAGO-PAGO
TUTUILA

About three miles to the southward, off the mouth of the harbour, there is a coral bank half a mile long, on which the sea breaks in stormy weather: the least depth of water found on it was four and a half fathoms; the depth increases to the eastward, towards the island of Anuu.

As we arrived off the harbour the wind grew light, and finally came out ahead, thus compelling us to beat in to our anchorage, under the direction of Edmund Foxall, a white pilot. He usually comes off to vessels when within two or three miles of the harbour, on a signal being made. We made many tacks before we reached our anchorage, which was in deep water, twenty-nine fathoms. About half a mile from the entrance of the harbour, it bends at right angles. In this position, surrounded by cliffs, the firing of a gun produces a remarkable reverberation, resembling loud peals of thunder.

We were surrounded, as soon as we entered, by a large number of canoes, filled with natives, who all seemed delighted with the ship and the number of men on board. When we had moored, one of the principal chiefs, whose name was Toa, was admitted on board; he was an athletic, muscular man, of large frame, about forty years of age, with a pleasant expression of countenance; he manifested great

pleasure in welcoming us. He began by telling me, through the interpreter, that he was a missionary; that he had formerly been a great thief, and a doer of many bad acts, but being now a missionary, he was reformed and stole no more. He told this with such an open expression of countenance and so much simplicity, that I could scarcely forbear smiling. After I had finished asking him questions, he continued eyeing me from head to foot, as if determining my dimensions. I told the interpreter to ask him why he looked at me so intently. He replied, that he had a coat on shore that was too tight for him about the arms and chest, and he believed it would fit me: if so, he should be glad to exchange it for the jacket I had on. Not being inclined to this exchange, I ordered a small hatchet to be given him. This gratified him much, and he instantly went over the ship's side to show it to his friends. This same Toa is chief of the village of Fungasar, about three miles distant from the harbour, on the north side of the island. He learns to read and write, being taught by some of the small children, and attends school regularly. He became of great use to us, and was a constant visiter. During one of his visits on board, he espied some red umbrellas among the presents, and from that time was continually endeavouring to obtain one for his wife, and brought many articles in the hope of inducing us to part with it in exchange for them.

The day after our arrival a place was chosen for our observatory, and the tents and instruments were landed. Understanding that I wanted to see the sun and stars, I was told by Mr. Murray, the white residents, and natives, that I should have little weather for observations for the next fortnight, which proved literally true with the exception of the last two days.

The geological character of this island is similar to that of Manua; it has only a shore-reef of coral, and soundings extend some distance from it. It has many desirable ports or bays on its north side, where vessels may obtain wood, water, and supplies. The best and safest port, however, is that of Pago-pago, on its south side, which affords a safe harbour for vessels to overhaul, and where supplies may be obtained in abundance.

Tutuila is thickly settled round its shores, and particularly at its southwestern end: this is lower and more easily cultivated than the eastern, which is high and rugged. The only communication is by the sea-shore, the hills being too precipitous and difficult of ascent to pass over.

The men of Tutuila are a remarkably tall fine-looking set, with

intelligent and pleasing countenances. In comparison with the Tahitians, they would be called sedate.

The women are far from being good-looking, with the exception of some of the younger ones. They are remarkably domestic and virtuous, exhibiting a strange contrast to those of Tahiti. Here there is no indiscriminate intercourse, the marriage tie is respected, and parents are extremely fond of their offspring. The inhabitants are disposed to be hospitable to strangers, although they expect remuneration for it. Travelling is generally believed to be safe throughout the island of Tutuila, and the natives, as far as our experience goes, are not the blood-thirsty race they have been reported to be. The unfavourable estimate of their character has, I presume, been derived from those who first knew them, and particularly from their attack upon the expedition of La Perouse. Of this conflict I obtained the following particulars from the Rev. Mr. Murray, who had them from an old man, who was a witness of the affray. The latter is the only individual now alive in the settlement who was present when it occurred, and his testimony was corroborated by others who had heard of it from those who witnessed the scene.

On the morning of the massacre, the vessels stood in towards the land. About noon the boats went ashore, as recorded by La Perouse, and while on shore, a number of canoes, belonging to the island of Upolu (to which Tutuila was at the time subject), went from the shore, and proceeded directly to the vessels. When these canoes were alongside, a young man in one of them laid his hand on an iron bolt in some part of the ships, with the intention, it is supposed, of stealing it. He was fired upon by the French. The ball passed through his shoulders, and mortally wounded him. The natives, on seeing the effect of the shot on one of their number, were greatly enraged, and immediately left the vessels, and hastened to the shore, where they found the boats that had gone to get water. On reaching them, they began the attack, which resulted in the massacre of M. De Langle, and of those who were with him on shore. When the natives began this attack, the great body of the French were absent from their boats; some were in the bushes gathering plants, and others talking to the females. On the commencement of the disturbance, they all rushed towards their boats, and the confusion became general. The minute circumstances of the affray, farther than the above, cannot now be ascertained from the natives. They are, however, very clear in reference to the cause, and to those who were the actors in it, viz., the natives of Upolu. The Tutuilians maintain that they endeavoured to save the lives of the French; and, on the following day, as soon as they

dared to venture from the mountains, whither they had fled during the massacre, they collected the bodies, which they found in a state of nudity, dressed them in native cloth, and buried them in the beach, as they were accustomed to bury their own chiefs. The actors in the massacre proceeded at once to Upolu, which will account for their having been afterwards seen there, and recognised by the French. Our inquiries relative to the spot where they had buried the bodies, were not satisfactorily answered. How the carpenter's son escaped is not known. He is said to be still living at a village on the eastern part of the island. There appears to be mention made of a boy among the missing, in La Perouse's account. Levasii, a chief of the district of Faleletai, was at the massacre of the party of La Perouse. He was then a boy of thirteen years of age. He remembered the occurrence, and that three of the Papalangi were killed.

The perpetrators of the deed were some young chiefs from the district, who were on a "malanga" to Tutuila. At that time Aana district had the rule, or was the "Malo" party, and domineered over the inhabitants of the other islands and districts.

The village of Pago-pago contains about thirty dwellings, and a council-house, which is in use as a church, until the large one they are engaged in building shall be finished. Every village has a council-house for the entertainment of visiters, and the accommodation of meetings.

This island is under several chiefs, each of whom rules over a town, district, or bay. The present chief of Pago-pago is Mowna, the adopted son of the last chief, Pomale, who died not long since, leaving an only son, also called Pomale, who from his great modesty lost his inheritance. Mowna was more crafty than Pomale, and understood well his rival's character. After the death of the old chief, these two young men, about the same age, became candidates for the succession. Mowna, through his intrigues, succeeded in getting the whole family together to decide between them. Both Mowna and Pomale were present, the former appearing dejected, silent, and willing to leave the decision to the meeting; whilst Pomale, when asked who should be chief, said with his usual modesty that he was in favour of Mowna, who was accordingly made chief. Mowna, however, is now so in name only, for Pomale rules in fact. This arises from his good character, and the influence he derives from the missionaries, of whom he is one of the most active and pious supporters, and withal a great preacher. So great is the confidence Mr. Murray has in Pomale, that he is frequently left to take charge of the congregation, during the absence of Mr. Murray in another part of the island.

The greatest restraint on the conduct of the chiefs, appears to be the fear of losing the good name of their ancestors, and of not handing it down to posterity pure and unspotted. This feeling seems to govern their conduct, and from the information I received, may be made use of as an appeal to them, to avoid doing evil, and to do right.

The missionary, the Rev. Mr. Murray, deserves the greatest credit for this state of things. He has unbounded influence over the natives, and deserves it. The ten commandments are the common law of the island, wherever Christianity has taken root, and any infringement of them is surely punished;—the guilty persons being put out of the church, and denied the privilege of attending worship. They are looked upon as having fallen, and are consequently avoided. This fear of public opinion, I was informed, was found to be sufficient to deter them from the commission of crimes and immoral practices.

The tapa or rugs worn by distinguished chiefs, were preserved, and were formerly much venerated by them. Since the introduction of Christianity, however, such has been its influence that they will now readily part with any thing of the kind. Pomale was induced to let us have those in his possession, and also exchanged the "war spirit" mat for a small present for his wife.

On the 17th, our friend Toa gave us an invitation to visit him at his town of Fungasar, on the north side of the island. It is situated on the next bay to that now called Massacre Bay, where De Langle was killed. The path across the island is a very difficult one to travel; it leads up through the valley, and across the dividing ridge, which is quite precipitous. The rain which had fallen made it very slippery, and the journey was fatiguing to those not accustomed to this kind of walking.

I was much struck here with the manliness and intelligence of the natives, and with their frank open expression of countenance. The colour of their complexion is rather darker than that of the natives of Tahiti. The outlines of face and figure are very like those we had left, their hair and eyes black, and their teeth good and white. Some of them had frizzled hair, but it was generally straight.

Just before arriving at the village, we were met by Toa, and some of his relations and attendants, who welcomed us to his village, saluting me by rubbing his nose with my hand; this is the usual custom.

He ordered a pig, taro, bread-fruit, &c., &c., for our entertainment. These were cooked in the universal Polynesian mode, by being covered up in a hole with hot stones. We were soon told that the feast was ready, but having had some experience of their cooking, we

desired it might remain in the oven a little while longer. Their usual custom is to take it out the moment that the taro is cooked, and from daily practice they are well acquainted with the time required to cook it. This is scarcely sufficient to give the pig time to be warmed through. Our request prevailed, and in the course of half an hour we were summoned to the council-house or fale-tele, where strangers are always entertained. We were shown our seats, on one side of a circle, while Toa, with his family and friends, occupied the other. The mats, except one, were not very clean. The pig, which must have weighed one hundred pounds, was brought in, and laid with the taro and bread-fruit on banana-leaves. A butcher's knife was all that we possessed to carve it with. The whole village, old and young, men, women, and children, who were waiting in anxious expectation for their share, now surrounded us, and made it uncomfortable to eat, with so many hungry expectants; I made haste, therefore, to divide it, and with it they soon dispersed. The taro was exceedingly well cooked, dry, and farinaceous. The bread-fruit they said was too young, and not being considered good by them, they objected to giving us any of it, but did not hesitate to eat it themselves. A pig is a great treat to them, for although they have plenty, they prefer selling to eating them.

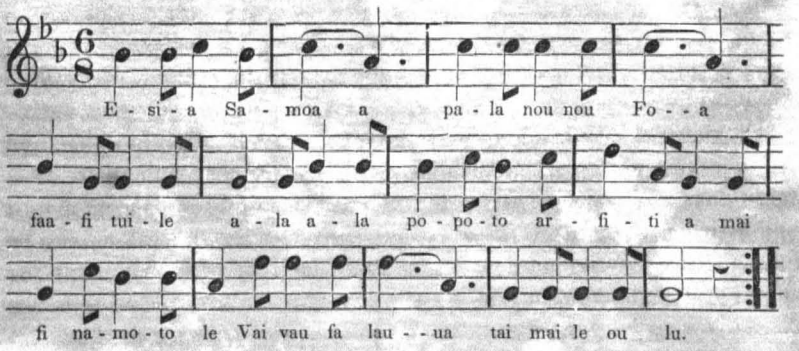
All kinds of provisions in these islands are enhancing in value, and will continue to do so. It is remarkable how the prices fluctuate. On some days provisions of all kinds will be exceedingly cheap, and almost any article will be taken in exchange; and then again nothing can be found to please the natives, or induce them to trade, although the quantity for sale is equally as great. It was not a little amusing to see the natives sitting whole days to obtain the price of their fowl or pig, and persisting in their refusal of the offer made; and this was sometimes done by a large number at the same time, all remaining true to each other until their poe or food became exhausted, when they would take the earliest opportunity of disposing of their different parcels.

In the grove near the village, we saw several piles of stones. I was told they were the graves in which they formerly buried the dead, just below the surface. On the top were placed stones, forming a high pile. Now they bury their dead in graves about three feet deep, and enclose them with the Dracæna, which grows rapidly, and forms a pretty and neat trellis.

Toa became quite communicative, and as he showed me about his village, he told me, through the interpreter, that before the missionaries came, the chiefs all had their "aitu" or spirits, which they worshipped,

and that they felt themselves obliged to do every thing they commanded. His aitu were fresh-water eels, which he constantly fed in the brook near the village. I visited it, and requested him to catch one, which he attempted to do; but after a long search, turning over large stones, and examining holes, he was unsuccessful. He said there were many in it formerly, and quite tame; but since he had embraced Christianity, they had all been caught and destroyed. On farther questioning him, he told me that he had himself eaten them; and that formerly if any one had touched, disturbed, or attempted to catch one, he should have killed him immediately. He said his eels were very good to eat, and was sorry he could not find any more; and laughed very heartily when I spoke to him about eating his aitu. I mention this circumstance to show the powerful effect the Christian religion has had upon the ancient customs of this people.

After much persuasion, they were induced to sing some of their old war-songs. Mr. Drayton wrote one down as a specimen of their music; the words were written by one of the interpreters.



To the above they sing a kind of second, with very correct harmony. They do not seem to have any particular air among them, and in singing the above, they did not sound the same notes every time. All their music sounds alike, and the above will give a good idea of it. A translation of the song was made by the same interpreter, and is as follows.

A chief of Samoa attacks an enemy on another island and conquers. After the victors have embarked safely for their island, they sing as follows:

"Keep her away, and mind the helm."

And when they get home, the people sing,—

"We are glad you have come to your island of plenty,
We have waited a long time for our chief and canoes."

Toa, after his unsuccessful search for his favourite eels, went into the brook for a bath, which he told me he very frequently did during the day; and it was delightful to see the pleasure he took in it. The natives, indeed, are almost constantly in the water, and, consequently, very cleanly in their persons. Finding that it occupied too much of their thoughts on the Sabbath, bathing on that day has been forbidden.

This village contained about forty houses, of a large and commodious size, and about two hundred inhabitants, a number of whom were absent on a visit to Upolu.

Towards evening, we took our leave of Toa, thanking him warmly for his kindness; we were escorted to the outside of the village by his friends and relations, whilst Toa himself accompanied us to Pago-pago.

The natives have no fixed time for meals, eating whenever they feel hungry. Their food consists of pork, fish, bread-fruit, cocoa-nuts, bananas, &c., but principally of taro. All of these are produced in abundance. Water is their common drink, and, notwithstanding cocoa-nuts are so abundant, the milk is seldom used: the trouble of procuring them is too much for them. They use ava made from the Piper mythisticum, and it is the only intoxicating drink they have.* It is never used to excess, although old and young, male and female, are very fond of it. The taste, to one unaccustomed to it, is not pleasant, being somewhat similar to that of rhubarb and magnesia. Their mode of preparing it is the same as has already been described.

They sleep on the large coarse mats with which they always cover the floors of their houses. Over these they spread coloured tapas, some of which are also used for nets of protection against the numerous musquitoes. For a pillow they use a piece of bamboo supported on small legs. Their hair is frequently shorn close, and coral, lime, or ashes sprinkled over it to destroy the vermin, which are generated in great numbers in their tapas and mats.

According to old Toa, a native is in a comfortable condition when he has a good house; a well-made visiting canoe; a neat, handy, large and well-formed woman for a wife; a taro-patch with a good fence; cocoa-nut, and bread-fruit trees, with a reasonable number of pigs.

The women are now admitted to the same privileges as the men. The chiefs have still great power over the people, although the influence of the missionaries has tended greatly to diminish it. Most of the people look back to the days when polygamy existed with regret,

* The ava does not, according to the whites, intoxicate in the same manner as ardent spirits, but produces a temporary paralysis, tremors, and a confused feeling about the head, indistinctness and distortion of vision, somewhat resembling the effect of opium.

and cannot understand why they are restricted to one wife. They say, "Why should God be so unreasonable as to require them to give up all their wives but one for his convenience?" They pay just attention to their religious duties; morning and evening prayers are always said, as is grace before their meals, and with a devotion rarely to be seen among civilized men.

Their amusements seem to be few; their books are constantly before them, and a great portion of their time is employed over them. Old gray-headed men may be seen poring over the alphabet, and taught by some of the youngest of the family. The employment of the men is to cultivate and weed the taro, and to take care of the fences; they also make sennit for their houses, and canoes for fishing. The women are engaged in making mats, and the boys and girls play, and wait upon their seniors.

Next to study, fishing is their great employment. This is performed by driving the fish towards the nets in shoal water, where they are easily caught. The cast-net is also used.

The only amusement we saw, is a game called lafo-tupe, which is played with cocoa-nut shells, and resembles shuffle-board.

Mr. Murray is an amiable as well as a truly pious man, and the natives have imitated the example set by him. He studiously avoids any intercourse with them in the way of trade or barter, except so much as is necessary for the provision of his own family, and devotes his whole time to preaching and teaching the gospel. He is one of the missionaries engaged in translating the Bible, many parts of which are now completed, and extensively used by the natives, many of whom read and write well.

Their observance of the Sabbath is very strict; and it is impossible to get a native to do any thing whatsoever on that day, but perform his religious duties. They attend church regularly. In Mr. Murray's congregation there are about thirty communicants, and nearly one thousand attendants on public worship. They come from many of the surrounding villages. Mr. Murray has been here about three years, and the native preachers nine or ten; he is well acquainted with the difficulties of his station, but seemed to feel assured that his exertions were about being crowned with success. He represented to me that the natives were very tractable, and desired exceedingly to be taught; that they had much application, seemed to comprehend many things, and were certainly not surpassed in intelligence by any of the natives of Polynesia.

Polygamy, which formerly was practised to a great extent, still exists among those who have not been converted.

Circumcision is practised among them.

They carry their children in the same singular manner on the hip, as was shown in wood-cut of the low archipelago. They are early betrothed, without regard to age, the girl being saa, or tabooed, until of marriageable age. During the intervening time, all kinds of native property are accumulated, such as mats, &c., for the bridal day. Two days previous to it, the inhabitants of the district are gathered together for feasting and dancing. On the third day, the bride is produced before the assembled multitude, and the ceremony attendant on marriage that was customary among the Jews performed. After the marriage had been consummated, the dowry was exhibited, and each article being held up it was proclaimed by whom it was presented; the multitude, having consumed all the eatables, and exhausted their strength in rioting and debauchery, dispersed.

Infanticide has never been practised on this island.

I have seldom seen a more devout or attentive collection of people than I observed at times in the church meeting, which was held in the council-house at Pago-pago; the new church was undergoing alterations; for on its being completed, it was found it would not accommodate the congregation, when they determined to enlarge it.

Upon the conclusion of a long service, they were observed to divide themselves into three parties; one remaining in the church, and the other two repairing to different buildings. The object of this was, that they might listen to instructions from their native teachers explanatory of the sermon, and also receive exhortations to put away all that is unbecoming to the Christian character. The afternoon is employed in further explanations and examinations by the missionaries. The native missionaries have also meetings on Fridays.

Their mode of singing hymns is peculiar, the whole mass joining in some parts, with all the lungs they could muster. This exercise appeared to afford them great delight. The congregation were mostly dressed in tapas, or clothed in one sort of garment or other; but the person who attracted our attention most, was the consort of Pomale. From being the wife of the most influential personage, she had received more presents from us than any other; and she endeavoured, on this occasion, to display on her person the greater part, if not all, that she had thus acquired. These consisted of a red calico gown, four or five petticoats of different colours, woollen socks, green slippers, cap and bonnet, a large plaid blanket shawl, and a pair of polar gloves, the whole surmounted by a flaming red silk umbrella—and this with the thermometer at 87°! It was difficult to keep our eyes off her during the service, and before the end of it, all her finery became

awry. The other natives also seemed to have the desire of exhibiting their acquisitions, though these consisted frequently of no more than a vest, or a pair of pantaloons, without shirt, or occasionally of a long-skirted coat, without either of the former garments, so that a small roll of tapa was needed to cover their nether parts.

Some unauthorized attempts were made to induce the natives to break the missionary laws, by offers of great value in their eyes; they were told the missionaries would not see them. On understanding which, they pointed to the heavens, and replied, "There missionary see." This was conclusive, and a just and severe rebuke.

The Peacock and Flying-Fish again joined us on the 18th of October, in eight days from Papieti. Orders were at once given them to proceed to Upolu, to commence the survey of that island. (See Appendix VI.) They did not sail, however, until the 20th, having been detained by the winds. The harbour of Pago-pago, though easy of access, is extremely difficult to leave, in consequence of the southeast trade-winds blowing directly in, and rendering it necessary to make short tacks. Indeed, a vessel no sooner gets headway on one tack, than it is found necessary to tack again. The sea is often heavy at the mouth of the harbour, and the shore is lined with a narrow coral reef all around it. I was glad to see the Peacock safe outside, after beating about four hours.

During our stay on this island, the whole was examined, the harbour surveyed, and the principal heights determined. Tide-gauges were kept on the north and south sides, and the observations for magnetic dip, variation, and intensity, made. The temperature during our stay of fourteen days varied from 73° to 88°; the mean temperature was 80·50°.

The climate of Tutuila is mild and agreeable, particularly at Pago-pago, where the temperature is lower than it is elsewhere on the island, in consequence of its generally being overshadowed with clouds that hang on the high land. There is usually a fine breeze, which sets in about ten o'clock, and continues until sunset. The nights being calm, much dew falls in fine weather. We had little fair weather during our stay, and the prognostication of the natives proved too true, respecting the difficulty of seeing the sun and stars. The wind at times was very strong, almost a gale, accompanied by light rain and mist. I was informed that there is a good deal of rain during the year, but seldom such a continuance of it as we experienced. There does not appear to be any particular rainy season, but they are liable to these high winds during the winter months, or from October

to March.* I obtained from the pilot a register of the weather from January, 1839, till October of the same year, which will show more clearly the state of the climate. This will be found in Appendix VII.

In our explorations, nearly all the villages of this island vere visited by some of the officers of the squadron, and from their report they much resemble each other. Those of Fagaitua and Leone, on the southern coast, are the largest, and are more of the Devil's towns than the others. One of their customs is truly savage. They seldom use pork as a food, consequently it is a great rarity with them; but at intervals of several months the villagers assemble at a feast, at which thirty or forty hogs are killed, when they gormandize on them for four or five days, or as long as the food lasts. The whole is eaten, entrails and all. Fish and taro are the principal food, and large numbers of the natives may be seen fishing off the coast in fine weather. The kind of fish usually caught are mullet.

There is a large kind of worm which they esteem a great delicacy, and which is eaten with much relish. It is impossible to see them sucking down the entrails of the biche-de-mar, holithuria, and echina, without disgust. They also eat many of the shell-fish that are found on the shore.

The temperature found on the top of Matafoa, at the altitude of two thousand three hundred and fifty-nine feet, was at 4 P. M., 69·4°, whilst that on board the ship was 79·5°.

We made an endeavour here to search the reefs at night for shells, with flambeaux or torchlight, after the manner of the Chain Islanders, by which means it is said that many species of shells are taken, which are never seen by daylight. We cannot vouch for this being the case, our experiment not having succeeded. The leaves of the cocoa-nut were either too green or too wet to burn. If success really attends this method, it is a singular trait in the economy of mollusca, which are generally supposed to be partial to daylight. It was my determination to make another trial, under more favourable circumstances; but from our constant occupation and fatigue of the crew in the daytime, we were unable to renew the experiment.

A few days before leaving Pago-pago, Mr. Murray brought to my notice the account of a murder that was supposed to have been committed on a foreigner at the west end of the island, for the sake of the little property he had about him. The report, however, appeared to me to be too vague to authorize any delay for the purpose of making an

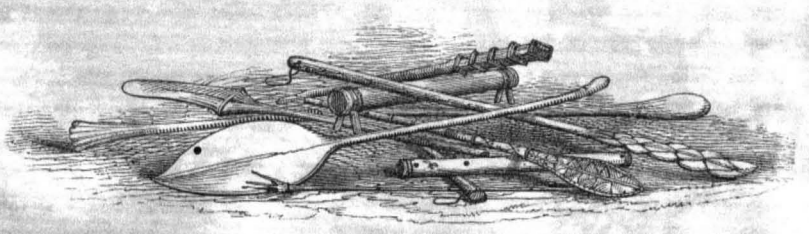
* During eleven days of our stay, the quantity of rain that fell was $4\frac{6}{10}$ inches.

examination into it; and finding the man was reported to be a runaway convict, I had no right to interfere in the affair, and therefore, took no steps to inquire into it.

On the 7th of November, 1837, this harbour exhibited one of those remarkable phenomena of the oscillation of the tidal wave. The observations made on it are extracted from the letter of a missionary resident at Pago-pago, to the Rev. Mr. Mills, of Upolu, who obligingly gave me permission to copy them. They will be found in Appendix VIII.

The weather during the preceding evening was boisterous, with frequent squalls from the east, which continued till 7 A. M., from which time the day was cloudy, with frequent light showers. After 5 P. M., it continued to rain until ten o'clock at night. On the 8th, the tide continued to ebb and flow in an irregular manner. The day was fine and very warm. This phenomenon does not appear to have been observed at any other place in the Samoan Group, but was experienced, as will be noticed hereafter, at the Group Hawaii.

The peculiar formation of the harbour of Pago-pago, would make it more likely to be observed there than elsewhere. The ordinary rise of the tide is no more than four and a half feet, and neither before, during the continuance, nor after this phenomenon, were any shocks of earthquakes observed in any part of the group where missionaries are settled.



NAVIGATOR CLUBS, ETC.

CHAPTER IV.

CONTENTS.

DEPARTURE OF THE VINCENNES FROM TUTUILA — HER NARROW ESCAPE FROM WRECK — APPEARANCE OF UPOLU — MESSAGE FROM CAPTAIN HUDSON — CASE OF TUVAI — COUNCIL OF THE CHIEFS — ARGUMENTS IN BEHALF OF TUVAI — CAPTAIN HUDSON'S REPLY — DECISION OF THE CASE OF TUVAI — HIS BEHAVIOUR — COMPLAINTS OF THE NATIVES AGAINST WHALERS — PEA'S VISIT TO TUVAI — OUTRAGES OF OPOTUNO — VISIT TO MR. WILLIAMS — INTERVIEW WITH MALIETOA — HIS DAUGHTER — REQUEST FOR A COUNCIL OF CHIEFS — THE VINCENNES ORDERED INTO PORT — SURVEYING PARTIES — LAKE OF LAUTO — ITS LEGEND — SUPERSTITION REGARDING IT — MOUNT TOFUA — SUBTERRANEAN STREAMS — GEOLOGICAL STRUCTURE OF UPOLU — STREAMS OF LAVA — CAVERNS — SWALLOWS AT SANGA — WATERFALLS — GIMBLET RELIGION — ATTEMPT TO CAPTURE OPOTUNO — FONO, OR COUNCIL, OF HIGH CHIEFS — ITS OBJECT — MR. J. WILLIAMS RECOGNISED AS CONSUL — REGULATIONS DISCUSSED AND ADOPTED — DEMAND FOR OPOTUNO — FONO ADJOURNED — ITS SECOND MEETING — SPEECH OF MALIETOA'S ORATOR — REWARD OFFERED FOR THE APPREHENSION OF OPOTUNO — TERRITORIAL DIVISIONS OF UPOLU — TYRANNY OF TAMAFAGO — WAR OF AANA — DESOLATION OF THAT DISTRICT — ISLAND OF MANONO — ISLAND OF APOLIMA — PROCEEDINGS OF THE PORPOISE AT SAVAII — DR. PICKERING AND LIEUTENANT MAURY LAND THERE — SURVEY OF THE COAST OF SAVAII — NATIVE MISSIONARY AT SALACHUA — FELIALUPO — ASAU — BAY OF MATAATUA — PECULIARITIES OF ITS INHABITANTS — SAPAPALE — DR. PICKERING'S JOURNEY IN THE INTERIOR OF SAVAII — CURIOSITY OF THE NATIVES — FISHING ON THE CORAL REEF — DESCRIPTION OF SAVAII — ITS PEAK — ITS INTERIOR — ITS WANT OF STREAMS — ITS CORAL REEF — ITS SOIL — THE PORPOISE PROCEEDS TO TUTUILA, AND THENCE TO UPOLU — REUNION OF THE SQUADRON — REVIEW OF THE MARINES — EARTHQUAKES.

EMMA MALLETOA

Engraved by P. Bolton from a sketch by A.T. Agate

CHAPTER IV.

UPOLU—MANONO—SAVAII.

1839.

The surveys of the island of Tutuila having been completed by the 23d November, we made preparations for our departure, and on the 25th we weighed anchor. In leaving the harbour we had a narrow escape from wreck; the almost constant southeast wind, which is fair to a vessel entering the bay, and makes it easy of access, is ahead on going out, which renders egress difficult; it therefore becomes necessary to make frequent tacks, and a vessel must be well manœuvred to escape accident, for to miss stays would be almost certain to bring about shipwreck. When we beat out, the wind was light, and it failed altogether just as we reached the most dangerous part of the channel; we were in consequence brought within an oar's length of the reef, on which a heavy surf was breaking. The moment was a trying one, and the event doubtful; all were at their stations, and not a word was spoken. Of my own feelings on the occasion I have no very precise recollection; merely remembering that I felt as if I breathed more freely after the crisis had passed and we were in safety.

The afternoon was fine, and we sailed along the southern shore of the island, admiring its diversified surface, its luxuriant groves, and the smiling villages that crown its bays. Where the valleys come out from between the ridges to the shore, there is usually a level plain extending inwards for a couple of miles; these plains are occupied for the most part by groves of cocoa-nut and bread-fruit, beneath whose shade lie the dwellings of the natives. Many of the inhabitants were abroad in their canoes, employed in fishing; some of them scarcely seemed to notice the ship, passing them rapidly with all sail set, while others appeared to regard her with intense curiosity. In the evening we had much lightning, but no thunder.

The distance between Tutuila and Upolu, of thirty-six miles, was soon passed, and in the morning we were delighted with the view of the latter island as we ran down its coast to the westward. It appears much richer and more fruitful than the other islands of this group, and may be described as of moderate height, rising gradually in a succession of ridges from a low shore; here and there, broad and fertile valleys are seen, with numerous streams falling from the mountains in cascades. The eastern portion of the island is much more rugged than the western; the main ridge runs east and west, and ridges or spurs run back to it from the northern coast in a southeast direction. Between these lateral ridges are broad and fertile valleys, decreasing in width as they recede from the coast. The shore is lined with a coral reef, which is now and then interrupted by channels, and forms snug and convenient harbours.

At noon we descried the Peacock lying in the harbour of Apia, and shortly afterwards I received a message from Captain Hudson, saying that my presence was required on shore. In the hope that it was not a business of such a nature as to cause detention, I left the Vincennes in the offing, while I went ashore in my boat. On reaching the land, I found the chiefs engaged in the trial of a native called Tuvai, who had killed an American named Edward Cavenaugh, a native of New Bedford.

It appeared that on Captain Hudson's arrival the murderer was pointed out to him in the village, upon which he very properly determined to have the offender punished, and gave orders to have him arrested. He was in consequence seized in a house near the water, and carried on board the Peacock. Being taken by surprise, he offered no resistance to his capture. Captain Hudson then requested a conference with the neighbouring chiefs, who in consequence had assembled on the 27th.

The fono, as such assemblies are called, was held in the council-house, or fale-tele, where the chiefs were collected. The Rev. Mr. Mills acted as interpreter on the occasion. Captain Hudson, through him, stated that the object of his having requested them to assemble was to bring the accused to a trial before them, in order that if his guilt were established, he might be brought to condign punishment: he then pointed out to them the guilt and consequences of the crime of murder, and declared the course he had considered it his duty to adopt. The chiefs listened attentively to this address, and in reply, through the principal one, admitted that the man taken was in reality the guilty person, a fact known to every person upon the island. Captain Hudson then stated to them that it was absolutely necessary

that Tuvai should be promptly punished, in order that others might be deterred from the commission of the same crime. He suggested, however, that in spite of the universal belief in Tuvai's having committed the crime, it was proper that he should undergo a trial, or at least an examination, in order that he might have the privilege of being heard in his own defence.

This suggestion being approved, Tuvai was brought on shore under a military guard, and placed in the centre of the building. He was an ill-looking fellow, of about twenty-eight years of age, and manifested no fear, but looked about him with the greatest composure.

The trial was simple enough: he was first asked by the chiefs whether he was guilty of the crime, to which he answered that he was; being next asked why he had committed it, he replied that he had done it in order to possess himself of the man's property, (clothes and a knife.)

The chiefs, among whom was Pea, of Apia, to whom the criminal was distantly related, made every effort in their power to save his life; stating that he was in darkness, and therefore unconscious of the guilt of the action, when he committed the murder; that as they had but just emerged from heathenism they ought not to be subjected for past actions, to laws they knew not; that these laws were made for people who occupied a more elevated station; that Tuvai was a poor man of no account, and was not a person of sufficient importance to be noticed by a great people like us; that faa Samoa (the Samoan fashion) did not allow men to be put to death in cold blood, but that after so long a time had elapsed, as in the instance before them, it admitted of a ransom.

Pea went on to say, that many bad acts had been committed upon natives by white men, with impunity, and asked whether the Christian religion sanctioned the taking of human life. He then appealed to our generosity to pardon the present crime, and assured us that no such offences should be committed in future.

Pea had one of those countenances which exhibits all that is passing in the mind. It was amusing to see him at one time exhibiting a picture of whimsical distress at the idea of being compelled to put his kinsman to death, and immediately afterwards laughing at something ludicrous which had occurred to him.

Pea was seconded in his endeavours by Vavasa, of Manono, one of the finest-looking of the chiefs, whose attitudes and movements were full of grace, and his manner exceedingly haughty and bold.

In reply to their arguments, Captain Hudson stated, that however freely other sins might be forgiven, in consideration of their late

benighted state, even the darkness of Paganism could not extenuate the crime of murder. He told them that the Scriptures said, "Whoso sheddeth man's blood, by man shall his blood be shed;" that nothing but the life of the offender could satisfy the demands of justice, and that they must execute the criminal themselves.

This announcement caused much excitement; the chiefs again asserted that they knew no such laws; that by the customs of Samoa, the anger of the friends and relations of a person who had been killed was to be appeased by a present from the criminal or his relations, and by a form of submission, which consisted in knocking their heads three times on the ground. To this it was replied, that the guilt of the prisoner had been proved and admitted—he must die.

The chiefs, after much reluctance, consented, but expressed great repugnance to an immediate execution. They urged in the most strenuous manner, that the criminal should be carried on board ship, and executed there, or that he should be taken to some uninhabited island and left. These alternatives were refused by Captain Hudson, and the chiefs seemed in great distress.

At this point of the discussion, the Vincennes was announced as being in sight, and the proceedings were suspended. An officer was immediately despatched, who, as has been already mentioned, boarded that vessel off the harbour.

When I landed, I found the assembly anxiously awaiting the result of my arrival. Captain Hudson and myself had a private interview, in which he detailed all the facts, and stated that it had been his intention to compel the chiefs to make all the preparations for the execution, but before it was carried into effect to come forward and reprieve the criminal, at the same time requesting Mr. Mills to make an appropriate speech, stating the reasons for the pardon.

After a full discussion of the whole subject, we came to the conclusion, that it would be best to transport the criminal to some other island; for it appeared probable that this would have a better effect than even his execution, as it would be longer remembered, while to cause him to be put to death might naturally excite a desire of revenge.

This decision was at once communicated to the chiefs, with a statement, that in conformity with the laws of Tahiti in such cases, Tuvai should be transported to a desert island, where he would never again have an opportunity of killing a white man. The chiefs, although evidently relieved from the most intense part of their distress, were still much affected by this decision.

The prisoner was then ordered to be taken on board the Peacock, whither he was followed by a crowd of natives, with many tears and

lamentations, among whom his wife was the most affected. Among others, Pea, the chief of Apia, to whom, as has been stated, the prisoner was related, was very much distressed and excited. Unable to vent his rage and trouble in any other manner, he spent it upon the crowd around him, striking in all directions with a huge stem of a cocoa-nut leaf, by which he soon dispersed them. I felt a curiosity to see what effect the sentence would have upon the prisoner. Death he would have suffered without uttering a murmur; but when he heard he was to be taken from his native land, his firmness was overcome, and he was observed to shed tears. He made no resistance to his being removed on board ship, but after he got there he said he would rather be put to death and buried in his own native island, than banished to a desert one.

After this difficult business was arranged, they brought their own grievances before me, and particularly their complaints against the American whalers. They said that some of them had evaded their port-charges, and refused to pay for the provisions with which they had been furnished. To this I replied that I was ready to indemnify them for their losses, and should ask no other proof of them than their own statement. They appeared struck with the unexpected liberality of this offer; but, after consultation, as if to manifest a corresponding feeling, declined to accept it. I then informed them that their port-charges for the squadron should be paid, which gave much satisfaction, particularly to old Pea, who would derive the principal benefit from them. The fono then broke up in great good humour.

Pea and some of the other chiefs were very anxious to hear from me what sort of an island Tuvai was to be put upon. They asked many questions in relation to it, and always among the first, whether there would be any cocoa-nut trees, Nature's first and best gift to them, upon it. Wishing to make the intended punishment as terrible as possible to them, I always replied that there would be none whatever.

After Tuvai was again on board ship, old Pea paid him a visit, in the course of which the former melted into tears, howled bitterly, and begged that he might be taken on shore to be put to death, in order that his body might be buried in his native soil. It appeared from information that we received, that this was a part of a concerted plan to obtain a farther commutation of his sentence, and that this affecting interview was got up in order to excite our sympathies. Finding it did not produce the desired effect, old Pea went about the ship with a doleful visage, exclaiming, "Eoloisa-ia-tu Tuvai"—have compassion on Tuvai.

I was in hopes to find the surveys of Upolu nearly, if not quite

finished; but the Flying-Fish, which was to have aided in performing them, had not yet been seen or heard from. This was no small disappointment, as it might compel me to bring the Vincennes into the harbour, and thus incur a serious delay.

Before I had decided upon this step, I learned that a chief of the name of Opotuno, whose capture had been considered so important by our government that a ship of war had been despatched for the express purpose, had again become troublesome, and was threatening vengeance upon all the whites who might fall in his power. I therefore determined to make an attempt to obtain possession of his person by stratagem. Lest, however, such an attempt should create disturbance in the island, or be productive of injury to the white residents, I determined, before putting my purpose into effect, to have an interview with the Rev. Mr. Williams, the principal missionary in these islands, both to consult as to the best mode of accomplishing this object, and to learn what effect it would be likely to have on the operations of the missionaries.* I accordingly set out for his residence at Fasetootai, about twenty miles to the westward of Apia, in the hope of seeing him. Mr. Cunningham, H. B. M. Vice-consul, was kind enough to accompany me.

We left the Peacock at sunset, and reached Mr. Williams's snug cottage about midnight. Nothing could be kinder than the welcome he gave us; and the pleasure he expressed at our visit soon made us feel at home. He gave us supper, and provided us with comfortable beds. Shortly after our arrival, another party was welcomed, consisting of three ladies and a gentleman of the mission, who were in like manner provided for, without apparent inconvenience.

Mr. Williams seemed to me exactly what a missionary ought to be, pious, cheerful, and meek, although resolute. His whole thoughts seemed to be directed to the welfare of those whom he had undertaken to enlighten. His views were pointed not only to the diffusion of the gospel, but also to the extension of the useful arts, and whatever could tend to elevate the condition and eradicate the vices of the natives.

After a long consultation, Mr. Williams came to the conclusion that there was no reason for fearing that the arrest of Opotuno would be the cause of any injury to the whites or missionaries. He said that Opotuno was a blood-thirsty fellow, and that it would be doing the islands a great service should he be removed; that there was not a

* Mr. Williams is the author of the well-known Polynesian Missionary Researches, and it will be our melancholy office hereafter, to speak of his falling a martyr in his efforts to propagate the gospel.

shadow of doubt that he had murdered twelve whites, of whom several were Americans; that he was a determined enemy to the whites, and in the habit of saying that he would omit no opportunity of killing all who might come within his power. Mr. Williams, however, doubted the success of any attempt to take Opotuno, unless it was made under disguise; for upon the approach of all men-of-war, and during their stay, he lived in the mountains of Savaii, where it was impossible to find him.

The situation of Mr. Williams's cottage is pretty; it stands within a few rods of the beach, and is surrounded by a nicely-dressed lawn, on which are several fine trees; the background is filled up with cocoa-nut, bread-fruit, and a variety of other trees. Near by is the tiny ship-yard of his son, Mr. John Williams, who was taken by his father to England, and there taught all the mechanical trades. He has returned thence within a few months, with his wife, and by the aid of a few natives has already built himself a vessel of about twenty-five tons burden, which he proposes to employ in trading among these islands.

The next day we returned to Apia. On our way we stopped at Sagana for the purpose of visiting Malietoa, the principal chief of the Malo or conquering party.

Sagana is a neat settlement, and is regularly laid out; it is situated on a small peninsula, across whose isthmus a stone wall has been erected, for the purpose of protecting the plantations within it from the swine. The village contains about six hundred inhabitants, and there is a school composed of about fifty scholars kept by Mr. Wilson, one of the missionary teachers, son of the missionary at Matavai Bay.

No preparation had been made to receive us, for I came unannounced; nor, indeed, had it been my intention to stop, but hearing that this was the residence of Malietoa, and that he was at home, we paid him a visit. He was well advanced in age, and it was generally remarked that he bore a striking resemblance to General Jackson. The resemblance is not confined to that of person only; for Malietoa possesses also not a little of the same energy of character.

I have rarely seen a place where more attention is paid to cleanliness than at Sagana. A similar regard to neatness prevails in the walks around the village, and in the cultivation of the taro, melons, and bananas, which is carried on in the immediate vicinity. The paths leading to these cultivated grounds pass through fine shady groves. The preservation of the broad walks and paths appears to be rather an amusement than a labour to the villagers.

Here Malietoa was seen in his domestic circle, with his wives and

children around him. I found him in a small house, enjoying the afternoon breeze, with his daughter playing about him. She was about fifteen years of age, and decidedly the prettiest girl we had seen in this group; her name was Emma, and she was as intelligent as she was pretty.

The chief, whose hair was white with age, made us warmly welcome, and wished to go over to his fale-tele to receive us as became chiefs, but this I would not permit. His wives busied themselves in getting things in order, very much after the fashion of other parts of the world, when a stranger arrives unexpectedly. In a few minutes the fine mats were laid, the stools, calabashes, and straw put away. A clean shirt was slipped over the old man's head while my attention was called off to another object.

Malietoa's house was not larger than the others in the village, and exhibited no other difference from them than in containing a dais or platform, occupying about a third of it, and raised about a foot higher than the rest of the floor.

When the domestic arrangements were completed, large bunches of bananas and fresh cocoa-nuts were brought in and presented to us. Mr. Wilson was an excellent interpreter, and by his aid I had a long and agreeable talk with the old chief, who, when his wars were touched upon, appeared full of fire and animation.

I intimated my desire to have a conference with the ruling chiefs, for the purpose of transacting business, whereupon he readily assented to call a fono, and appointed the 4th of November as the earliest day on which he could possibly get the chiefs, a part of whom must come from Savaii, together. This day he named himself, after having made a reckoning of the six intervening days upon his fingers; I observed, however, that he found it necessary to repeat the count several times. Having transacted this business with him, and regaled ourselves on his hospitable fare, we took our leave.

On reaching the Peacock, I found that none of her surveying parties had returned, and the Flying-Fish was still missing; I thus became satisfied that I should be detained here for several days. I therefore sent orders for the Vincennes to make for the harbour, where she anchored in the afternoon, near the Peacock.

The next day, parties were despatched in various directions, so as to bring all parts of the island under examination at the same time.

One of these excursions was made across the island. On arriving at the highest point of the ridge, between Siuma and Siusinga, which has an elevation of two thousand and fifty feet, and just before the descent began, a clearing was found, in which were two mounds of earth, each

about fifteen feet high, and one hundred and twenty feet in circumference; several stone walls were also seen. In respect to these, there is a tradition that they were built by the warriors of Vavao, who invaded Upolu, and after their predatory warfare along the coast was over, occupied this commanding position for the purpose of cutting off the communication between the opposite sides of the island. The trees growing on these mounds are nearly two feet in diameter, and the missionaries have inferred from their inquiries that the invasion referred to occurred seventy or eighty years ago.

Messrs. Dana and Couthouy visited a lake called Lauto, which lies to the westward of this pass, and in the centre of an extinct crater. The edge of the crater was found to be two thousand five hundred and seventy feet above the sea, and the descent thence to the water of the lake is one hundred and twenty feet. These gentlemen succeeded in obtaining a line of soundings across the lake, by cutting down trees, and forming a raft of them. They found the depth in the middle nine and a half fathoms, decreasing thence gradually in all directions to the shore. The form of the lake is nearly circular, and it has a subterranean outlet. The hill in which this crater is situated is conical, and there is a low knoll at some distance to the south of it, which is the only other elevation in the neighbourhood, above the general height of the ridge.

The border of the crater is clothed with the usual forest foliage of these islands, which, however, exhibits here more than usual beauty, being decorated with the finely-worked fronds of the arborescent ferns, in widely-spread stars, and the graceful plumes of a large mountain palm.

The poets of the island have appreciated the beauty of the place, and allude to the perpetual verdure which adorns the banks of the lake, in the following line:

"Lauuto'o e le toi a e lau mea."
"Lauto, untouched by withered leaf."

There is a legend connected with this lake, that has more of poetic beauty and feeling than one would have supposed to exist among so rude a people. It is as follows.

Many generations since, during a war between Upolu and Savaii, a number of war-canoes from the latter island crossed over to attack Ulatamoa (or, as it is now called, Ulumoenga), the principal town in the district of Aana. At the time of their approach, two brothers, To'o and Ata, chanced to be paddling their canoes in the channel between the reef and the shore, and before they could reach the land

were attacked by a party of Savaiians. After a valiant defence, Ata was overpowered and slain, while To'o narrowly escaped the same fate.

Overwhelmed with sorrow at the loss of a brother whom he tenderly loved, To'o retired to a neighbouring mountain, and burying himself in the darkest recesses of its forests, made them resound with his bitter lamentations. At length in his wanderings he came to the summit, where, stooping down, he scooped out with his hands a vast hollow, and, leaning over its brink, suffered his tears to fall in until it was filled. The lake thus formed has ever since borne the appellation of Lauu-to'o.

The regard of To'o for his brother's memory was further evinced by his adoption of Ata's name, conjoined to his own as his family title, and the appellation of Toomata, a contraction of To'o-ma-ata, is retained by his descendants, who are still chiefs of note in Upolu, and from whom the tradition was derived.

The lake of Lauto is regarded with superstitious dread by the natives, who believe it to be the abode of the spirits, who, in former times, were regarded with great veneration, and worshipped. These were supposed to inhabit the waters of the lake, in the shape of eels, as thick as a cocoa-nut tree, and two fathoms long. The attempt of our gentlemen to explore it was looked upon as such a profanation that their native guides left them, and regarded them as persons doomed to accident if not to destruction. The eels were represented as so savage and fierce that they would bite a person's leg off. No eels, however, nor any other fish, were seen in the lake.

In the neighbourhood of the crater no rock was observed in place, nor any light scoria. Only a few fragments of stone were scattered about.

The cone of the crater of Lauto, is flatter than the others of the same character that were visited, and particularly than that of Mount Tofua. This is the westernmost of them all, and lies behind Fasetootai. It rises so boldly, that it is seen distinctly from the sea. This, with all the other craters, are situated upon the central ridge, and the most conspicuous of those which remain, are Siusinga, which lies behind Sagana and Faliata. There is also one upon Mount Malata, in the rear of Fangaloa, and another on the southern side of the island, near Salomana.

The part of the ridge on which Tofua is situated, is much lower than the cone itself, and has gradually declined from its eastern end. The ascent from Fasetootai has, for the first three or four miles, an almost imperceptible rise; after this, the slope increases rapidly until it becomes quite abrupt. Even in the steepest parts, however, the rock

was rarely visible, but is covered with a deep and fertile soil, arising from its decomposition, and mixed with vegetable mould. The whole declivity, from the very summit of the peak to the shore of the sea, is, like other parts of the island, clothed with a dense forest, which shuts out all view of the ocean, except from the top of the mountain. The ridge whence the cone rises was found to be one thousand one hundred and fifty feet above the level of the sea, and the angle of ascent thence upwards, was from 40° to 50°. The top of the peak, which forms the edge of the crater, is not more than fifteen feet wide in any place, and sometimes not more than half as much. It is of uniform height, and has a circular form; the cavity within it was estimated as having a circumference of about two and a quarter miles, and occupies the whole summit. The depth of the crater was found to be three hundred and sixty feet, and the whole of its interior is filled with lofty trees. The slope of the inner declivity was 60°. At the foot of this is an uneven plane, covered with earth and loose cinders or scoria. Upon this grow forest trees, many of which were more than one hundred feet in height, beneath which is a dense growth of shrubbery.

It was remarked, that although it had rained constantly for several days before this crater was visited, no water was found within it. This is accounted for by the fact that many of the brooks and streams on the island are subterranean throughout their whole course, while others are partly so. The former gush up near the sea-shore in large springs or fountains, forming natural, or feeding artificial pools, in which the natives bathe. According to our observations, such pools are so numerous on the western shore of the island, as to occur on the average, at intervals of a mile.

The rocks of this island are of the volcanic character that might be expected from the existence of so many craters. They are principally composed of a variety of basaltic lava, in which are found augite, felspar, albite, and chrysolite. Extensive currents of lava are seen, and are particularly abundant on the southern side of the island.

It appears as if these had flowed down towards the sea-shore in various directions, and that after their outer surface had cooled, the portion that remained liquid within had run out, and left a sort of tunnel. Such tunnels are numerous, and form the subterranean courses of the streams. Some of these natural tunnels are remarkable: among them, one visited near Sanga will serve as the type of all. It was found to be a cavern nine hundred and fifty-eight feet in length, extending in a southeast direction, and to have an average width of about fifteen feet; its roof was about eight feet in height. At the termination of this cave, there was a pool of water five feet in depth,

the temperature of which was observed to be 72°, while that of the air within the cavern was 76·6°, and that of the open air was 77·4°. These streams of lava are much more frequently seen on the southern than on the northern side of the island; they are also larger on the former of these sides, where they were in some places four miles in width.

The path from Vivimanga to Sanga is called the Stone Road, formed in part of blocks of lava. There are also in this neighbourhood many caves in the streams of lava. The cave at Sanga is the largest of these, and to describe it will convey an idea of those of smaller dimensions.

The cave at Sanga was dedicated to the god "Moso," who was supposed to reside in it. The entrance was found to be closed by an artificial wall built across it, about three feet thick; it is four feet high, and six feet wide. The sides, roof, and floor of this cavern are comparatively smooth, and are covered with stalagmites of a light yellowish colour, which are not calcareous.

It had been reported that this cave was frequented by a peculiar kind of swallow, which never ventured into the light of day. Mr. Peale, who was one of the party that visited it, found swallows in abundance, which made a bat-like noise, or rather one having a resemblance to the rattling of pebbles. So far, however, from their being a peculiar species, as they had been represented, they were the common species of the islands, and instead of shunning the light of day, they were continually passing in and out of the cavern, which was merely a place selected by them for breeding. On the ledges of the sides and roof their nests were found, composed of pieces of moss glued together. The eggs were white, and of a large size in proportion to the bird, and no more than one was found in each nest.

In traversing the island of Upolu, many deep gorges were seen, in which there were waterfalls. One of these cascades was measured, and found to be seven hundred and fifty feet in height, so that the whole of the water was dissipated in spray before it reached the bottom. These glens are wild in the extreme, and beautiful, from the great variety and peculiar character of the foliage with which they are clothed.

The south side of Upolu, like that of Tahiti, is much more luxuriant than the northern, which is owing to a like cause, namely, that, it receives more moisture from the prevailing winds.

The wild orange grows every where in great abundance, and in some places the road was literally strewed with the fruit, which here equals the cultivated variety in size.