

can be seen alike from the north or south, and is right in a line with the ship's course in passing. Being only 7 miles from the entrance to Pango Pango Bay or Harbour, the ships could pick up the port lights, and go in immediately to the wharf, in the darkest night. There are several fine harbours for schooners on both sides of Tutuila.

Savaii and Opolu contain the largest extent of flat land; fully two-thirds of their area, about 500,000 acres, are fit for cultivation. Tutuila is more mountainous than Savaii and Opolu; probably not more than one-third of its area, or about 50,000 acres, would be fit for cultivation; but it has a great advantage over the neighbouring islands in the possession of the excellent harbour of Pango Pango, described above. The whole group is of volcanic origin. Craters of extinct volcanoes are seen at various points. Some of the small islands of the group are composed of a single large crater rising abruptly from the sea. The soil on all the islands is exceedingly rich, and everywhere covered with dense vegetation, from the water's edge up to the tops of the mountains. The high mountain ridges, extending through the middle of the larger islands, attract the passing clouds, which furnish a copious and never-failing supply of moisture, and feed the numerous streams of beautiful clear water that abound in every direction.

The climate is mild and agreeable; the temperature generally ranges between 70° and 80°, but the heat is greatly subdued by the breezes that are constantly blowing. Mr. Williams, the British Consul, kept a meteorological register, for the Board of Trade, from 1860 to 1865, from which I made an abstract of the mean recorded temperature in every month in the year 1864. (Copy of this abstract is appended hereto.) The south-east trades blow steadily from April to October, being strongest in June and July. From November to March westerly winds frequently blow, but not for any length of time together. A strong gale may generally be looked for some time in January, but frequently an entire year will pass without a severe gale. February, as a rule, is fine, with variable winds. March is usually the worst and most boisterous month in the year, the winds being still variable, and gales occurring from north to north-west. Copious rains fall from the beginning of December to March. June and July are the coolest, and September and October the hottest months, although it will be seen, from the abstract above referred to, that there is very little variation in the temperature throughout the year. Hence the growth of vegetation goes on without check all the year round. Cotton and Indian corn yield three crops a year. I saw some of the latter gathered in the middle of January, which had been sown at the beginning of last October: thus it was planted and the crop gathered within four months. The taro also comes to maturity in four months, and is planted continuously all the year round. When the natives take up the taro they cut off the top, make a hole in the ground with a stick, into which the top is thrust without the ground being dug over or in any way prepared. A short time after it is planted they clear the ground, and mulch between the plants with grass and leaves to keep down the seeds. Bananas yield ripe fruit nine months after planting; some of the introduced varieties come to maturity in six months. This fruit attains a great size, especially the indigenous varieties, some of which I measured, and found to be 8 inches long and 9 inches in circumference.

Samoa is very rarely visited by the destructive hurricanes that so frequently sweep across most of the groups in the Pacific. In December, 1840, there was a severe gale, but scarcely what could be called a hurricane. In April, 1850, a hurricane occurred, when two ships and a schooner were wrecked at Apia. For twenty years after this—that is, up to 1870—the islands were entirely free from hurricanes; but four or five heavy gales occurred during that period. These hurricanes, when they occur, are often very local; sometimes they visit one island, leaving the others untouched; for instance, in January, 1870, a cyclone swept over Tutuila, but did not reach the other islands.

The following are the principal productions of the group: Cocoanuts, cotton, native chestnuts (*Inocarpus edulis*), candlenuts, bananas, mountain plantains, oranges, lemons, limes, citrons, shaddocks, pineapples, mangoes guavas, Malay apples, rose-apples, custard-apples, pawpaws, tamarinds, bread-fruit, yams, taro, pumpkins, melons, sweet potatoes, arrowroot, ginger, wild nutmeg, sugarcane, mandioc or sweet casava, indigo, coffee, Indian corn, tobacco, chilis, vi (*Spondias dulcis*), medicinal plants, several trees with very fragrant blossoms that might be used for the preparation of scents, some that exude aromatic gum, and others that furnish very handsome and durable wood, suitable for cabinet-ware and furniture.

There are two cotton plantations on Upolu, of from 200 to 300 acres each, belonging to Messrs. Goddefroy, and several smaller ones, belonging to other Europeans. Both the Sea Island and kidney cotton grow most luxuriantly, and bear well. When planted in March the first crop is ready for picking in July. The first year of planting there are two crops, one in July and one in September or October; in succeeding years three crops may be picked.

The chief article of export is cobra, which is the kernel of the cocoanut cut into small pieces and dried in the sun. The preparation of cocoanut oil has been almost entirely given up by the natives, as they find that they can get a more rapid and certain return for their labour by the simple process of preparing cobra. The oil is now expressed from the cobra on its reaching Europe. The trade mostly in request by the natives is white and printed calicos (which are known by the general name of "cloth," and are used by both sexes as *lava-lavas* or waist-cloths), gay-coloured cotton handkerchiefs, butcher's knives, and American axes. The knives most approved of are large heavy ones of about 14 or 16 inches in length, which the natives use for all purposes. Soap, sewing-cotton, and small fish-hooks come next. Double-barrelled guns, powder, lead, and shot are also in great demand just at present. It is alleged that since the introduction of fire-arms the loss of life in the native wars is much less than it used to be formerly, when they fought only with clubs and spears at close quarters, as the combatants observe great caution in approaching each other, from fear of the guns, and both sides commence firing a long way off of range.

The British Consul puts down the European population as under:—

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| British subjects | ... | ... | ... | ... | ... | 250 |
| Subjects of the United States of America | ... | ... | ... | ... | ... | 45 |
| Germans, Spaniards, Portuguese, and others | ... | ... | ... | ... | ... | 150 |

445

This must include the half-castes, for I am satisfied, from inquiries I made from old residents and others best able to give information on this point, that the foreign residents do not reach the number here given. I believe there are altogether about 250 Europeans on the group, most of whom are English.

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