

timber of the tomano has been long regarded as a valuable article of commerce, many vessels in past years being engaged in its collection, the logs being chiefly carried to San Francisco and the Spanish Main. It has now become scarce from this cause; indeed, even a generation since it was on inhabited isles very difficult to obtain in a transportable form, in consequence of its being so much used in canoe construction, and would have been altogether so had it not been for the fact that great and dense groves of it were on many islands "tabu" for religious purposes, altars, idol shrines, and places of sacrifices being located under their shadow, as in the case of the great Morai at Raiatea, and similar places of devil-worship. There are on these coral atolls other useful kinds of timber indigenous, such as the *to*, a very beautiful and fine-grained wood, now almost extinct; the *nangiia*, which, from its extreme hardness and strength, supplied to the savages, for many purposes, the place of iron implements; and the *tainu* (or *tahunu*), a remarkable provision of nature, since of all wood it is the most suitable for the speedy production of fire by friction: a piece of *tahunu*, which has been gathered when green and allowed to dry gradually in a sheltered place, can, in the hands of a skilful operator, be made to ignite in less than one minute. The process is exceedingly simple, but requires a great deal more practice and skill than appears at first sight; one of the most unmistakable tests of a man's experience of the savage state is the ability to make fire in this manner.

The majority of the islands of the Low Archipelago are as yet incapable of any cultivation, except chiefly for the growth of the cocoa-nut, consisting as they do almost entirely of coral gravel, with very little soil. Some fruits, however, have been introduced with success. For instance, limes flourish, and fig trees attain the greatest luxuriance. There are a few islands in the group which possess a most fertile soil, and are of considerable extent, such as Manga Reva, a basaltic land over 2,000 feet high. Here are five islands within one reef, one of them at least five miles long, clothed with forest and watered by abundant springs. But of the whole area of the Paumotus at least two-thirds are overrun by the screw palm tree or Pandanus, called *fara* in the native tongue. This is one of the most singular of all vegetable products, and demands an amount of attention of commercial speculators such as has never as yet been accorded to it, for the reason that in the time to come it is destined to supply (when its peculiar properties become generally known) the staple of several most profitable industries.

Growing in the most barren spots, creating to all appearance a dense and rotten jungle, it has been usually regarded by Europeans as a useless pest, whereas it is in reality one of the most remarkable products which the Divine wisdom has bestowed to supply the wants of man in the savage state, and, when utilized, as it shortly will be, to contribute to some of the most important necessities of civilization.

Its appearance is grotesque, somewhat resembling the grass tree of Australia, or the cabbage tree of New Zealand. It is called "screw palm" for the reason that it grows with a twist like the screw of an auger. Its height is usually from 20 to 40 feet, the stem being straight like a column, sending forth branches at regular intervals, in such a form as sometimes to remind one of the golden candlestick in the Tabernacle of Moses. Each of these limbs terminates in a tuft of long drooping leaves, having in the centre a large yellowish flower, of an overpowering odour, very agreeable, but sickly by reason of its intensity. Underneath this tuft hangs the fruit, which is of a dark green colour outwardly, of the size of a man's head, and a form resembling a pine apple, or more exactly that of the cone which on ancient sculptures is made to surmount the Thyrsus of Bacchus. This fruit is commonly regarded by white men as not only unpalatable, but even as not edible; nevertheless, it constitutes almost the sole subsistence of tens of thousands of barbarians, forasmuch as on very many low islands of the coral seas, such as some of the Kingsmills, and perhaps one-half of the Raliks, no other vegetable food exists.

When the fruit is ripe it easily comes to pieces, and is found to consist of a multitude of separate capsules, each of the form of a truncated cone with square corners, the small ends being arranged around a central core. Their surface is bright and smooth as ivory; in one species yellow, in the other blood-red. The outer end is hard as a stone, the inner soft, of the consistence of sugar-cane, and containing an equal, if not larger, proportion of saccharine matter. The interior of the capsule is fibrous; the custom of the natives is to chew the soft end, and having thus extracted all the nutriment, to throw on one side the hard portion, which they let lie in the sun till thoroughly dry, when they crack it between two stones and extract the "kiko" or kernel, which is similar to a filbert, and very wholesome. The ripe fruit, when boiled down, produces a large percentage of excellent molasses; also, when steamed in the Maori oven and mashed up in warm water, it yields an intoxicating liquor when fermented, and a strong spirit by distillation. But the chief use to which it is devoted is the preparation of what is called on the equator *kabobo*, which serves the savage of the more barren isles in the place of bread. The soft parts of the fruit are grated, and the pulp so obtained is dried in the sun. Its appearance is then that of coarse pine sawdust, of a dark brown colour and sweetish taste. It is packed in baskets, solidly trodden into a hard mass with the feet, and will keep for any length of time. When required for use, it is moistened, kneaded, and baked on the coals. It is strong food, easily digestible, and very wholesome, but not palatable to a European until he has become used to it; as it eats very much as coarse meal would do if one could imagine it to be mixed with more than an equal quantity of sawdust. All the navigating savages of the North Pacific victual their canoes with it when they go to sea. The Pandanus tree grows usually upon coral, gravel, and clean sand, where there is no particle of mould or soil, so that it seems beyond measure surprising that its roots could then find either moisture or nourishment. Nevertheless, it contains a superabundance of oily sap, which exudes freely wheresoever it is cut with an axe. Growing as it does upon sandbanks and gravel beds, it would be liable at any moment to be torn up by the wind if special provision had not been made for its security; from the ground upwards round and round the stem in a spiral row following the twist of the tree (to the height of about 12 feet) are what at first appear to be excrescences looking like warts; these continue to protrude in the form of horns growing downwards straight, and about the thickness of a man's arm, until they touch the ground, where they take deep root, sending out suckers in all directions, and so form a series of stays or shrouds round the tree on every side, so that it may safely defy the power of the most furious storms. These stays (which are of all lengths up to 12 feet), when