

126.—THE PEARL FISHERIES OF AUSTRALIA.**By Consul G. W. GRIFFIN.**

The pearl-shell fisheries of Torres Strait belong to the colony of Queensland, and are situated 1,500 miles from Brisbane and more than 2,000 miles from Sydney. Torres Strait is about 80 miles in width, and separates Queensland from the island of New Guinea. The navigation of the strait, although said to be safe and practicable, is in fact very difficult, on account of the innumerable islands, reefs, and shoals scattered about. The chief places at which the fisheries are conducted are Wai Weer, Albany Island, Jervis Island, Endeavor Strait, Friday Island, Prince of Wales Islands, and Possession Island.

Wages of the men.—A good diver can earn from \$60 to \$150 per month. He usually signs shipping articles for a period not exceeding three years, at a fixed sum per month and an interest in the catch or lay. Mr. Bayne, of Sydney, the owner of an important station at Prince of Wales Islands, who for many years has been engaged in pearl-shell fishing, states that several divers in his employ have earned as much as \$300 per month. The divers and crews are composed of South Sea Islanders, Malays, and a few Chinese and Lascars.

The diver is the captain of the boat, and the other men obey his orders. The duties of the tender consist in waiting on the diver, helping him to dress, and looking after him while in the water. The pay of the tender is from \$10 to \$12 per month, with a small interest in the catch, generally from one-sixtieth to one-eightieth part of the value of the shells. Each of the vessels generally has one diver and four tenders, who compose the crew. The tenders are engaged on regular shipping articles, and are paid off like any other merchant seamen.

Mr. Henry M. Chester, the resident magistrate at Thursday Island, says, in a recent report on the fisheries, that the natives are never overworked, and that they are always well fed and kindly treated. He further says that payment is usually made them in blankets, clothing, knives, hatchets, and beads, and that whenever they are dissatisfied with what they receive they seek other employment. Mr. Chester is of opinion that the competition for their services is of such a character as to secure for them fair treatment. All the available adult population of the island are employed as swimming divers, under "the masters and servants' act," and while their pay is small, it is made in the presence of the local authorities, and all the old men, women, and children receive food in seasons of scarcity. Mr. Chester admits, however, that the occupation of a diver is dangerous and not at all conducive to longevity, but adds that the loss of life among the natives from

such causes is more than counterbalanced by the abundant supply of wholesome food given them, and by the decrease in infanticide and other savage practices to which they were formerly addicted.

Methods of fishing.—The method pursued in pearl fishing is for a number of vessels to start out together and fish on the same ground. Each vessel carries supplies to last a fortnight. When in about 8 fathoms of water, if the tide is slack, the diver will jump overboard. His boots are heavily weighted with lead, so as to hasten his descent. Upon reaching the bottom he walks leisurely along until he comes to a patch of shells; then he signals to the boat to cast anchor. He carries with him a sack or bag to hold the shells, and as soon as it is filled it is lifted up, emptied out, and sent down to him again, he being able to remain under water several hours at a time. Some divers remain down from 9 o'clock in the morning until 5 o'clock in the afternoon.

The pearl-oysters lie on the ground, with the shells partly open, and great care is required in handling them, for if touched in the wrong way they will close upon the hand like a vise. Accidents of this kind not infrequently happen to inexperienced divers, who are obliged to signal those above to lift them up and remove the pearl-oyster from their hands.

The monsoons which blow in the strait from May until the end of September are often so severe that boats have to lay up for as much as ten days at a time. The average catch for each boat is from 1 to 1½ tons of shells per month. Unlike the fisheries in Ceylon and the Persian Gulf, there is little or no difficulty in collecting the shells, for they either lie loose on the ground or are only partially buried in the mud or sand.

The fisheries off the coast of West Australia, and especially at Shark Bay, produce the true pearl-oyster (*Avicula margaritifera*). For a long time this shell was supposed to be valueless on account of its thin and fragile structure, but now there is a great demand for it both in America and in Europe. It is especially prized by the French and German artists for fine inlaid cabinet work.

The young or chicken shell is the best, and commands the highest price. When the pearl-oyster is five or six years old the shells become blistered and wormy, and it is said that the oyster dies about the age of seven years. The divers in fishing make no effort to select any particular shell, but take every one that they can get, even the dead shells, which have the least value of any, on account of various blemishes, rotteness, lack of luster, &c. Pure-white silver-edged shells are the best.

The oysters in the West Australia fisheries are generally obtained by passing an iron dredge over the banks, but divers are also employed. Pearl-oysters are gregarious in their habits, and whenever one is met with it is almost certain that numbers of others will be found in the immediate neighborhood.

Divers are expert swimmers, and they go down to a depth of 4 or 5 fathoms, where it is said some of them can remain two minutes. The

occupation is an unwholesome one, and soon produces deafness and diseases of the chest and lungs. Blood not infrequently flows from the mouth, ears, and nostrils after the usual dip of forty or fifty seconds, which is repeated fifty or sixty times a day. The men also run the risk of being eaten by sharks, although death from this cause is not apt to occur except in untried fishing-grounds, as the noise of the divers is almost certain to drive the sharks away.

The pearl stations.—All the pearl-fishing stations in Torres Strait bear a very close resemblance to one another, and consist of a small but nice-looking residence for the manager and one of less pretension for the men, a warehouse for storing provisions, &c., and several sheds for drying the shells. Before the shells are brought to the station the boats usually run into land, and the men open the oysters, take out the pearls, if any, and throw the soft parts overboard. The shells are then roughly cleaned and stowed under the hatches. At the end of the voyage they are taken to the station, where they are counted and thoroughly cleaned. The shells are then assorted and dried, and after the outer edges are chipped off they are packed in cases, each case weighing from 270 to 300 pounds, and are ready for shipment.

No systematic effort has yet been made to collect pearls at Torres Strait, and such as are found become the property of the men, who secrete them in various ways, often by swallowing them. Some very fine specimens of pearls about the size of a hazel-nut, and of remarkable beauty and clearness, have recently found their way to the market from Torres Strait. Other specimens of a much larger size have been found there, but they were imperfect in shape and color.

Formation of pearls.—In oysters aged four years—which are judged by the shells, weight, and appearance—the best pearls are found. The shell, like the pearl, is formed by the secretion of the animal, and is composed of animal matter and lime. The iridescent hues on the inside of the shell are occasioned by the edges of the thin, wavy, concentric layers overlapping one another and reflecting the light. The minute furrows, containing translucent carbonate of lime, produce a series of more or less brilliant colors, according to the angle at which the light falls upon them. Occasionally some of the finest pearls are found loose in the shell. As many as one hundred pearls have been found in one oyster, but of little or no value. The pearls of the young oyster are yellow, and in the older oyster are of a pinkish hue.

The use of pearl-shells.—The pearl-shells shipped from Australia to the United States and Europe are used principally for the manufacture of knife-handles, shirt-buttons, &c. Considerable quantities are also used for papier-maché and other ornamental work. The pearl buttons, shirt-studs, &c., now made in the United States are said to be the best and cheapest in the world, a fact due in great measure to the care used in selecting the material and to the improved methods of cutting.

U. S. CONSULATE, *Sydney, New South Wales, April, 1885.*