

as the description of that danger by Rosser¹ coincides remarkably with Carteret's account, there can be little doubt that the shoals are identical.

Shortly before stopping to sound at noon, a commotion in the water was seen from the deck, which at first resembled the sea breaking over a reef. This, on examination, proved to be a school of whales about thirty in number, who were swimming to the westward. Their black backs appearing above the water looked at first remarkably like the stones on the edge of a reef, and they might easily have been taken for one.

At 6 P.M. the ship proceeded to the eastward under easy steam, the wind being light and variable. The early part of the day was fine, but from 1 P.M. to 6 P.M. rain squalls were experienced. The average velocity of the wind, by the anemometer, was six miles per hour.

From the 16th to the 20th, light breezes varying from north to east were experienced, the average velocity being from 9 to 15 miles per hour, the weather cloudy with passing showers; from the 20th to the 22nd the weather was quite calm, necessitating the use of steam. On the 22nd a sounding and temperatures were taken in 2000 fathoms, and the ship then proceeded for Humboldt Bay. Whilst sounding the ship was in lat. $0^{\circ} 39' S.$, long. $138^{\circ} 55' E.$, about 70 miles northeast of the numerous mouths of the Mámberan,² the largest river in New Guinea.

On the 21st and 22nd the specific gravity of the surface water was lower than usual, and the ship was at times surrounded by large quantities of drift wood. Among the surface organisms was *Noctiluca miliaris* and others indicative of shore waters; the Naturalists were away in boats on both days examining the drift wood. As the Mámberan is the only river of any importance on the north coast of New Guinea, there can be little doubt that the drift wood and fresh water were thence derived, especially as similar discharges from its mouths have been met with by other explorers.³ The river probably rises in the Charles Lewis Mountains on the opposite side of New Guinea, which are said to reach a height of over 16,000 feet. Long lines of drift wood disposed in curves at right angles to the direction in which the river lay were passed through by the ship in her progress. The propeller had to be constantly stopped lest it should be fouled by the wood. The logs had evidently not been very long in the water, being covered only by a few young Barnacles (*Balanus*) and Hydroids. Amongst the logs were many whole uprooted trees, one of which was 2 feet in diameter at its stem. The majority of the pieces of wood were small branches and small stems; the bark was often floating separately. The midribs of the leaves of a pinnate-leaved palm were abundant, and also the stems of a large Cane Grass (*Saccharum*), like that so abundant on the shores of the great river (Wai Levu) in Fiji. One of these cane stems was 14 feet in length,

¹ W. H. Rosser, North Pacific Pilot, part ii. p. 181, London, 1870.

² Auszüge aus den auf einer Neu Guinea Reise im Jahre 1873, geführten Tagebüchern, von A. B. Meyer, p. 6, Dresden, 1875.

³ The mouths of the river were passed by Rosenberg on his way to Humboldt Bay in 1862, *Nat. Tydsch. voor Nederl. Indie*, Deel. xxiv. p. 334, Batavia, 1862.