## CHAPTER XV.

Ternate to Samboangan—The Asteroidea—Samboangan to Ilo Ilo—The Amphipoda—Ilo Ilo to Manila—The Lamellibranchiata—Manila to Hong Kong—The Annelida—The Calcarea and Keratosa.

## TERNATE TO SAMBOANGAN.

On the 17th October, at 11.30 A.M., the Challenger left Ternate for the Philippines, passing out northwards of Hieri Island. During the passage the surveyors made many observations referring to the position of the land sighted.

The point on the coast of Gillolo opposite Hieri Island was wrongly placed on the chart; it lies N.E. \(\frac{3}{4}\) N., 8 miles from the peak of Hieri Island. Just over this point, in lat. 1° 2\frac{1}{2}' N., long. 127° 24' E., is a hill 1050 feet high, and N. by E., 3 miles from this hill, is a remarkable sharp peak 3450 feet high, in lat. 1° 5' N., long. 127° 25' E. About 8 miles north of this mountain is a flat-topped hill with four knobs on it, in lat. 1° 13' N., long. 127° 25' E. The coast of Gillolo did not appear to extend west of the meridian of 127° 23' E. At 6 P.M. Ternate Peak bore S. 44\frac{1}{2}\)° E., Hieri Peak S. 65° E., and Tidore Peak S. 37° E. From this position a course was shaped for Tifore Island.

On the 18th, at daylight, Tifore Island was in sight ahead, and Meyo Island to the northward. A clear day, which allowed of numerous astronomical observations being obtained, including the meridian altitude of Venus at 3 P.M., permitted the correct position of the two islands to be ascertained.

Meyo Island is about  $3\frac{1}{2}$  miles long, in an east and west direction, and rises gradually from the shore to the summit, 1280 feet above the level of the sea, which is in lat. 1°  $20\frac{1}{2}$ ′ N., long. 126° 22′ 40″ E.

Tifore Island is about 2 miles in length, in an E. by N. and W. by S. direction, and 1½ miles in breadth. On its northwest end is a saddle peak 530 feet high, the eastern and highest summit of which is in lat. 1° 1′ N., long. 126° 8′ 20″ E. A cable from its north point is a small islet, which has a steep bluff at the north end, sloping gradually to the southward. On the eastern side of Tifore Island there is said to be a bay, in which the depths are reported as being 20 or 30 fathoms, but there is a ridge of coral across its entrance with but from 1 to 3 fathoms water over it. The Malay proas frequently take shelter here, and it is sometimes used as a rendezvous for pirates. Outside the harbour is anchorage for large ships; from the description given of this harbour, it would appear to be formed by an extinct crater. It was a matter of regret that time did not permit landing on this uninhabited island. The Malays also state that anchorage may be found either north or south of Meyo Island. The channel between Meyo and Tifore Islands is 21 miles wide, and free from danger.

The wind was very light all day, nearly calm, so that very little progress was made. At 5 p.m., however, a breeze sprang up from the northeastward which lasted until 10 p.m. At 8 p.m. Meyo Island bore east, and Tifore S. by. E.  $\frac{1}{2}$  E., from whence a N.W. course was steered for Bejaren Island.

On the 19th, at daylight, the ship was found to be 20 miles southeast of Bejaren Island, having