

The surface fauna and flora were much the same as at the previous Station, the following being recorded in the note-books :—*Globigerina*, Diphyids, *Sagitta*, Terebellids, Cytherids, *Saphirina* and other Copepods, *Hyperia*, *Phronima*, *Euphausia megalopæ*, *Sergestes*, Archizoëæ, *Atlanta*, *Pneumonoderma*, *Hyalæa* [= *Cavolinia*], *Spirialis* [= *Limacina*], large *Tiedemannia* [= *Gleba*] with house. STATION 244.

Station 245 (Sounding 387), Yokohama to Sandwich Islands (see Chart 36 and Diagram 17). STATION 245.

June 30, 1875; lat. 36° 23' N., long. 174° 31' E.

Temperature of air at noon, 69°·8; mean for the day, 69°·9.

Temperature of water :—

| | | | |
|-----------------------|------|------------------------|------|
| Surface, | 69·0 | 300 fathoms, | 42·0 |
| 10 fathoms, | 62·6 | 400 " | 40·2 |
| 20 " | 60·8 | 500 " | 38·8 |
| 30 " | 59·3 | 600 " | 37·6 |
| 40 " | 58·3 | 700 " | 36·8 |
| 50 " | 57·5 | 800 " | 36·4 |
| 75 " | 56·4 | 900 " | 36·1 |
| 100 " | 55·6 | 1000 " | 35·9 |
| 125 " | 54·4 | 1100 " | 35·7 |
| 150 " | 52·9 | 1200 " | 35·5 |
| 175 " | 51·0 | 1300 " | 35·3 |
| 200 " | 48·8 | 1400 " | 35·1 |
| 225 " | 46·2 | 1500 " | 34·9 |
| 250 " | 44·2 | Bottom, | 34·9 |
| 275 " | 43·0 | | |

Density at 60° F. at surface, 1·02556; bottom, 1·02553.

Depth, 2775 fathoms; deposit, Red Clay, containing only a trace of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 1 P.M. got up steam. At 1.30 P.M. shortened and furled sails, and at 2 P.M. sounded in 2775 fathoms. Obtained serial temperatures down to 1500 fathoms. The carbonic acid was determined in bottom water, and amounted to 35·3 milligrammes per litre. At 4.30 P.M. lowered a line with half a dozen tow-nets attached: two at the bottom, two at 500 fathoms from the bottom, and two at 1000 fathoms from the bottom, the lead being sent down to 2700 fathoms. At 7.40 P.M. hove up tow-nets, the two nets at the end of the rope coming up fouled. At 7.45 P.M. proceeded under steam. Albatrosses, boatswain birds, and Mother Carey's chickens were seen about the ship.