

Date. 1875.	Station.	Velocity of wind in miles per hour.	Force of wind by Beau- fort's scale, as noted in log.
December 14	299	12	2
„ 17	300	12	2
„ 28	302	16	3
„ 30	303	14	3 to 4, mean 3½

The deposit at 2160 fathoms off Valparaiso contained 16 per cent. of carbonate of lime, and was a blue mud, in all essential respects similar to that in 2225 fathoms at the Station before entering Valparaiso on the 17th November. The trawling was even more productive than on that occasion, for besides some pumice stones and a few manganese nodules, over one hundred specimens of invertebrates and a few fish were obtained. In the special Reports already published, forty-two new species of deep-sea animals are recorded from this Station.

As far as can be judged at present, the trawlings and dredgings on the blue muds near continental coasts are much more productive than those at similar depths on other kinds of deposits far removed from continents. For instance, although many dredgings and trawlings were taken during the cruise between Japan and Chili in depths of about 2000 fathoms or less, none of them can be compared in productiveness either with respect to number of individuals or species with the hauls in 1875 and 2300 fathoms off Japan, or 2225 and 2160 fathoms off the coast of Chili. This fact was noted so often during the cruise that it is difficult to believe it to be a mere accident. It is probably connected with the fact that food is more abundant near continental shores where large rivers enter the sea, and possibly also with proximity to the shallow waters of continental land, whence it may be supposed deep-sea forms have been originally derived. Whether or not animals from trawlings farther removed from shallow water are on the whole more abnormal than those from similar depths near shore, cannot with any certainty be stated until the whole of the groups have been fully worked out, but there are indications that such is the case.

The deposit at 1375 fathoms, 20 miles to the eastward of Juan Fernandez, was a Globigerina ooze containing 54 per cent. of carbonate of lime, which consisted of the shells of Foraminifera, a few fragments of Pteropods, Echinoderms, and Polyzoa. The mineral particles were chiefly of volcanic origin, and among them were very many fragments of palagonite.

The trawl contained over one hundred deep-sea animals and fragments of palagonite, pumice, and tufa. The trawl appeared to have caught in something at the bottom, for