

of all the types of marine invertebrata; though undoubtedly in very deep water the number of species procured of the higher groups was greatly reduced, and in many cases the individuals appeared to be dwarfed. From these observations (which thoroughly corroborated those of Dr. Wallich and others, about which there had been some difference of opinion on account of the imperfection of the appliances at the command of the observers), we concluded that probably in no part of the ocean were the conditions so altered by depth as to preclude the existence of animal life,—that life had no bathymetrical limit. Still we could not consider the question thoroughly settled; and when upon consultation with Captain Calver we found him perfectly ready to attempt any depth, and from his previous experience sanguine of success, we determined to apply to the Hydrographer to sanction an attempt to dredge in the deepest soundings within our reach, viz. 2,500 fathoms indicated on the chart 250 miles west of Ushant. The deepest reliable soundings do not go much beyond 3,000 fathoms; and we felt that if we could establish the existence of life, and if we could determine the conditions with accuracy down to 2,500 fathoms, the general question would be virtually solved for all depths of the ocean, and any further investigation of its deeper abysses would be mere matter of curiosity and of detail. The Hydrographer cordially acquiesced in this change of plan; and on the 17th of July the 'Porcupine' left Belfast under the scientific direction of the writer; Mr. Hunter, F.C.S., Chemical Assistant in Queen's College, Belfast, taking charge of the examination and analysis of the sea-water.