

depth being 1985 fathoms. The expedition visited the Vestmanna Islands, Iceland, Jan Mayen, Bear Island, Spitzbergen, the Faroe Islands, and reached a latitude of 80° N. Important observations were made bearing on meteorology, temperature, currents, chemistry, marine zoology, and the contour of the sea-bed, and the reports on the scientific results are published in both Norwegian and English in parallel columns with numerous illustrations in the form of lithographic plates, maps, and woodcuts.<sup>1</sup>

In the summers of 1881 to 1883 the Italian Government despatched the "Washington," under Captain Magnaghi, to investigate by means of dredgings and temperature observations a portion of the western basin of the Mediterranean; some valuable temperature results were obtained, and Professor Giglioli recorded the capture, in depths of from 300 to 1000 fathoms, of Crustaceans, Fishes, Brachiopods and Starfishes, closely allied to those obtained by the Challenger and other expeditions at similar depths in the open ocean.<sup>2</sup> The results were considered important, as bearing on the previous observations of Forbes and Carpenter. In the years 1882 to 1885 the "Vettor Pisani" circum-navigated the globe, with Chierchia on board, who made interesting and extensive collections of the pelagic fauna and flora, which have created much interest among zoologists.<sup>3</sup>

During the years 1880 to 1883 important series of deep-sea investigations were carried on by the French Government in the ships "Travailleur" and "Talisman" in the Bay of Biscay and the eastern parts of the Atlantic as far south as the Cape Verde Islands. These explorations were carried out under the direction of a scientific commission, of which Professor H. Milne-Edwards was president, the other members being the Marquis de Folin, Professors A. Milne-Edwards, Vaillant, Marion, Perrier and Fischer. Dr Gwyn Jeffreys and the Rev. A. M. Norman took part in one of the excursions. The important zoological and other results of these expeditions are now in course of publication in a valuable series of memoirs prepared under the able direction of Professor Alphonse Milne-Edwards, and issued under the auspices of the French Government.<sup>4</sup>

Since the year 1885 Prince Albert the First, of Monaco, has carried out a series of most interesting observations on the currents of the North Atlantic by means of floats sent off from his yacht the "Hirondelle" at various positions and at stated times. The results of these experiments have been published on an elaborate chart. By means of ingeniously arranged traps let down into comparatively deep water, the Prince has made important zoological discoveries. These marine investigations are now being continued in a new steam yacht, the "Princesse Alice," which is probably the first ship especially

<sup>1</sup> Den Norske Nordhavs-Expedition, Christiania, 1880-1891.

<sup>2</sup> Enrico H. Giglioli, *Prima Campagna Talassographica del R. Piroscifo "Washington,"* Roma, 1881.

<sup>3</sup> See G. Chierchia, *Collezioni per studi di scienze naturali fatte nel viaggio intorno al mondo dalla R. Corvett "Vettor Pisani,"* Roma, 1885.

<sup>4</sup> See *Expéditions Scientifiques du Travailleur et du Talisman pendant les Années 1880, 1881, 1882, 1883,* Paris, 1891, &c.