

Expeditions to occupy the Faroe Channel. On the representations of Murray and Tizard, H.M.S. "Knight Errant" in 1880, and H.M.S. "Triton" in 1882, were engaged in re-examining the Faroe Channel. The result was the discovery of the Wyville Thomson Ridge, which separates the warm and cold areas, and accounts for the great difference in the marine faunas in the deep water on either side of this ridge. Detailed lists of the animals obtained by these four expeditions were published in a paper by Murray,¹ who shows that 216 species and varieties were recorded from the warm area, and 217 species and varieties from the cold area, while only 48 species and varieties were found to be common to the two areas.

Murray and Tizard.
The "Knight Errant."
The "Triton."
Wyville Thomson Ridge.

From 1880 to 1883 the French ships "Travailleur" and "Talisman" investigated the eastern Atlantic, while from 1881 to 1885 the Italian ships "Washington" and "Vettor Pisani," the former in the Mediterranean and the latter during a circumnavigating cruise, were engaged in biological and other scientific work.

The "Travailleur."
The "Talisman."
The "Washington."
The "Vettor Pisani."

In 1883 J. Y. Buchanan took part in the sounding expedition of the S.S. "Dacia," belonging to the India-Rubber, Gutta-Percha, and Telegraph Works Company, of Silvertown, when surveying the route for a submarine cable from Cadiz to the Canary Islands, which resulted in the discovery of several oceanic shoals rising steeply from deep water; and again in 1885-86 he joined the same company's S.S. "Buccaneer" while exploring the Gulf of Guinea, accompanied by a trained naturalist, John Rattray, when valuable observations as to the depth, temperature, density, currents, and plankton were made.

J. Y. Buchanan.
The "Dacia."

The "Buccaneer."
John Rattray.

During the years 1883 to 1886 the U.S.S. "Enterprise" brought together a most important collection of deposit-samples taken throughout a cruise embracing all the great oceans.

The "Enterprise."

From 1884 to 1892 Murray investigated the sea-lochs along the west coast of Scotland on board his steam-yacht, the "Medusa," and discovered in the deeper waters of Loch Etive and Upper Loch Fyne remnants of an Arctic fauna. The physical results obtained were used by Mill in his Memoir on the Clyde Sea Area.²

John Murray.

The "Medusa."

H. R. Mill.

Since the year 1885 the Prince of Monaco has carried on oceanographical work in a systematic manner in the Mediter-

Prince of Monaco.

¹ "The Physical and Biological Conditions of the Seas and Estuaries about North Britain," *Proc. Phil. Soc. Glasgow*, vol. xvii. p. 306, 1886.

² *Trans. Roy. Soc. Edin.*, vols. xxxvi. and xxxviii., 1891, 1894.