

[I.]
GENERAL ACCOUNT
OF THE
ATOLL OF FUNAFUTI

BY C. HEDLEY, Conchologist to the Australian Museum.

THE ARCHIPELAGO.

THE Ellice Group is an Archipelago of somewhat vague limits, which trends for about four hundred miles in a north-westerly and south-easterly direction, and lies between Lat. $5^{\circ} 35'$ and $11^{\circ} 20'$ South, and Long. 176° and 180° East. After a gap of a hundred and fifty miles, the same general trend is continued across the equator into the Northern Hemisphere by the Gilberts, otherwise known as the Kingsmill or Line Islands, whose physical features repeat those of the Ellice Group, though the character of their inhabitants is widely different.

This particular archipelago is indeed but a link in a huge chain of islands which extends for about 3,500 miles from the Austral Islands through the Herveys, Samoas, Ellices, and Gilberts, to the Marshalls, forming the S.W. edge of that axial trough described by Dana* as the Central Depression of the Pacific, mapped by Whitmee† as the Great Atoll Valley, and mentioned by Lapworth as "the mightiest of all the submarine buckles of the earth crust;"‡ the opposite N.E. edge of which is indicated by the answering chain of islands stretching from Hawaii to Kure. West of this Marshall-Austral chain (the "zone pacifique australe" of Sacco§), and roughly parallel both to it and to the East Australian coast, is a second series of elevations whose contour, as shown by the "Challenger's" cross sections,|| is that of waves directed westward. These latter elevations have in common a fauna and flora characteristically continental, in contrast to the essentially drift fauna and flora of the outer chain, from which they are also distinguished by a system of volcanoes. The term Melanesian Plateau has been proposed¶ as a collective geographical name for these elevations,—whose summits, now projecting as dry land, are New Zealand, Lord Howe Island, New

* Dana—Corals and Coral Islands, 1872, p. 328.

† Encyc. Britt., (9) xix., 1885, Pl. iii.

‡ Rep. Brit. Assoc. for 1892 (1893), p. 705.

§ Sacco—Essai sur l'Orogenie de la Terre, Turin, 1895, p. 31.

|| Challenger Reports—Deep Sea Deposits, 1891, Diagrams, 11, 12, 13.

¶ Hedley—Proc. Linn. Soc. N.S.W. (2), vii., 1892 (1893), p. 335.